

REMARKS

This paper is responsive to the Final Office Action dated March 21, 2007. Claims 1 - 5 and 10 - 20 are pending in this application and have been rejected. Reexamination is respectfully requested in view of the following remarks.

Response to Arguments (Paragraph 9, Page 9)

At page 9, beginning at line 4, the Examiner urges that Applicant's discussion of memory on page 16 is a limitation not recited in the claims. In Applicant's initial arguments, the term "memory" was used in the context of its use in Nakamura (US Patent 6,468,162). Nakamura is the reference relied upon under 35 USC § 102 and 35 USC § 103. In '162, at column 4, lines 66 - 67, Nakamura equates the information storage device to a memory card or personal digital assistant (PDA 54). In Nakamura the portable information storage device (54) is also referred to as "a memory card" (68) at column 7, lines 66 - 67. Therefore, the portable information device referred to as (54) (column 7, line 48) is the same as (68) which is defined as a memory card. Nakamura also teaches that a portable information device may be in the form of a personal digital assistant (PDA) or a portable game machine (74) (column 8, line 6 - 9).

At column 9, beginning at line 50 and continuing through column 10, Figure 6A is described with respect to the memory card

which has information written into it. This is a computer readable memory card according to Nakamura. Figures 6A through 6C describe reading and writing into the memory card. From column 7 through the end of the specification, there is discussion of reading and writing of information into the memory card (storage).

Attached is a dictionary definition which teaches that memory is sometimes distinguished from storage. '162 refers to card (54) as an information storage device (column 4, line 66). It also refers to the same item as a memory card. In accordance with '162, the memory card is the same as storage (see attached dictionary definition which states, "Memory is sometimes distinguished from storage, or the physical medium that holds the much larger amounts of data that won't fit into RAM . . ."). Therefore, in accordance with the teachings of '162, and the dictionary definition, storage and memory are the same thing. This is the way the terms are used in the art. Therefore, the terms memory and storage are to be interpreted the same way in terms of the invention claimed (storage).

When Applicant used the term "memory" in the argument, this was the term selected from '162 and the '162 description of the information storage device where the term "memory" was used to compare the storage on the card of Nakamura, which the Examiner relies upon, to reject the storage claimed. In the preamble, Applicant's claim is for storage. Incidentally, this is also the

function of Applicant's claimed language that is, "writes changed character data in the trading card."

Nakamura '162

The following description of '162 is Nakamura in terms of an information storage device and not in terms of memory. It is in terms of Applicant's claimed stores character data.

Nakamura has a different concept of a trading card. Nakamura's trading card (72) does not include an information storage device (54) or (68). The Examiner has pointed to Figures 11A and 11B as illustrating the printing card (72). Figure 7 also shows the printed trading card. Here it should be noted that the printing operation of card (72) does not provide for placing of data into the portable information storage device. Instead, the data is in a separate device, which is called a memory (storage) card, or a portable information storage device and these are the same thing in '162. This storage is in Figure 6, which is also called a memory card. Information from Nakamura's memory card (portable information storage device 68) is read to provide information to a separate print card (72) (see column 10, lines 44 - 45). As can be seen in Figure 3A, the gaming machine includes two inputs, input (70) is for receipt of the portable information device, and (72) outputs the printed card. The game, therefore, requires a portable information storage device and only outputs a printed card at the end of the

game. As discussed above, the printed card does not include the portable information device (e.g., a memory card or personal digital assistant as described at the bottom of column 4). All memory or storage is placed on the memory card (portable information storage device (68), which is a different device according to '162. In the description of Figures 11A, 11B, 12A, 12B and beginning in column 12, it is shown that while card (72) (printed card) provides information to the player, it is only visual. The memory card (portable information storage device 68) is the portable information device (54) (see column 7, lines 65 - 67).

Claim 1

Applicant's discussion of claim 1 has been deemed to argue features of the invention that are not recited in rejected claims (see page 9, lines 4 - 9 of the Office Action). Applicant's discussion of claim 1, therefore, is rewritten below to place it in terms of Applicant's claims and the disclosure of '162.

Applicant's claim 1 requires an updating device that writes changed character data in the trading card in response to a change in character data according to a state of proceeding with the game. This is a change in a trading card that stores character data (claim 1, lines 2 and 3). It is this change of stored character data that is provided in Applicant's trading card. On the other hand, as pointed out above, '162 provides a

change in character in a portable information storage device (a memory card according to '162). Instead, '162 uses a card (68) that is equivalent to card (54) which is described as either a memory card or a portable information storage device. When the information storage device of '162 (which is also described as memory in '162) is compared to Applicant's claim 1, it is seen that the storage card of '162 is clearly separate from the other card that is the printed card.

Next, in claim 1, Applicant states that the updating is in accordance to a state of proceeding with the game. This is the game in progress and the updating of stored character data in Applicant's claim is updated during play.

The printing of the trading card, which is the last paragraph of claim 1, occurs at the end of the game and is placed visually onto the surface of the trading card. In Applicant's claim 1, the updating device writes changed character data in the trading card and a printing device prints a detail of the changed character data onto the surface of the trading card. This language of claim 1 places the data "in the trading card" and the printing "on the surface" of the same trading card. In this way, Applicant claims but a single card (the trading card), which has data in it and printing on it. In contrast, '162 has two separate cards that do not combine "in" and "on" functions at the same card. Applicant's claim when read as a whole claims only one card. For these reasons '162 is not a complete anticipation

under 35 USC § 102.

The above restatement of Applicant's original argument is in terms of Applicant's claimed invention only, and references to memory are for purposes of **identification of storage in '162**, which interchanges the terms "memory" and "information storage."

Page 9, Beginning at Line 10

of the Examiners Response to Arguments

In this portion of the response, the Examiner argues:

The printed matter on the face of the trading card of Nakamura stores character data ("trading card which stores character data"). In addition to being a "printing device," the printer (56) of Nakamura may also be considered a "data updating device" because it prints/writes changed character data to the trading card (see Fig. 7; col. 11, lines 47-53).

This is incorrect. There is never storage of data on the same card which is printed on in '162. On the other hand, Applicant claims two separate items on the card, which are the "writes changed data" and the "printing device."

Here the Examiner is arguing that the print on the face is the same as Applicant's claimed "a data updating device which writes changed character data in the trading card." The Examiner further argues that the claimed printing device that prints a detail of the changed character data onto the surface of the trading card is the same thing. This is not in conformance with the claim that puts the data in the trading card and printing on the surface of the trading card. It also does not agree with how

storage and printing are used in '162.

As previously pointed out, Nakamura, instead of using a single card, uses two cards - one for the information storage (memory card or personal digital assistant 54), and another separate card for printing which is shown in Figure 7 and described at column 11.

Nakamura '162 is also consistent with terminology used in the computer arts. Nakamura refers to handling of information that is written or read from a memory or storage device in the usual way where reading and writing is to a memory. On the other hand, Nakamura equally distinguishes between writing and printing. Printing in the computer arts refers to printing on paper, not reading and writing on paper. The Examiner in his construction of the claim would go against the terminology as used in '162 and throughout the computer arts, which is that reading and writing relate to input and output from a memory while printing is just that, printing on a surface. Here, Applicant is also consistent with Nakamura where Applicant claims printing a detail onto the surface of the trading card and where Applicant claims, "writes changed character data in the trading card."

Nakamura, like Applicant, also distinguishes between storing and printing by storing information in the portable information storage device or memory of Nakamura, and printing on the separate card.

Applicant has conducted computer word searches of Nakamura '162 for the following words: stored, printed, memory card, and data. Attached is a copy of Nakamura where these four terms are underlined. When these four terms are read in the context of Nakamura, it is seen that Nakamura teaches storing or stored in the portable information device, which has memory and printing on a separate memory card. It is further seen that Nakamura refers to memory on the memory card, which is separate from the printed card. Please see attached underlined copy of '162.

Claims 10 and 12

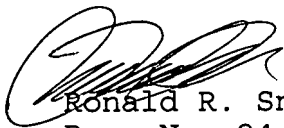
The Examiner has again rejected claims 10 - 12 under 35 USC § 103 as being unpatentable over Ohta in view of Kazoshi. The Examiner reasons that it would be obvious to combine because to increase "aesthetic appeal." There is nothing in the references that teaches the level of skill in the art that would suggest the desired result that is only argued by the Examiner. There is no motivation to combine the references found by the Examiner. Absent a motivation and level of skill found in the art, the invention is not obvious.

"Data" and "Print"

Attached are definitions from dictionaries that show that in the computer arts (which this invention clearly is) data and datum are not the same as print.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action in accordance thereof is requested. In the event there is any reason why the application cannot be allowed in this current condition, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems by Interview or Examiner's Amendment.

Respectfully submitted,



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Date: May 18, 2007

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RRS/bam



memory

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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

memory

DEFINITION - Memory is the electronic holding place for instructions and data that your computer's microprocessor can reach quickly. When your computer is in normal operation, its memory usually contains the main parts of the operating system and some or all of the application programs and related data that are being used. Memory is often used as a shorter synonym for random access memory (RAM). This kind of memory is located on one or more microchips that are physically close to the microprocessor in your computer. Most desktop and notebook computers sold today include at least 16 megabytes of RAM, and are upgradeable to include more. The more RAM you have, the less frequently the computer has to access instructions and data from the more slowly accessed hard disk form of storage.

Memory is sometimes distinguished from storage, or the physical medium that holds the much larger amounts of data that won't fit into RAM and may not be immediately needed there. Storage devices include hard disks, floppy disks, CD-ROM, and tape backup systems. The terms auxiliary storage, auxiliary memory, and secondary memory have also been used for this kind of data repository.

Additional kinds of integrated and quickly accessible memory are read-only memory (ROM), programmable ROM (PROM), and erasable programmable ROM (EPROM). These are used to keep special programs and data, such as the basic input/output system, that need to be in your computer all the time.

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Do you have something to add to this definition? Let us know.
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***da-shi-ki** (dā shē'kē) *n.* [coined (1967) by J. Benning, its U.S. manufacturer] a loose-fitting, usually brightly colored, robe or tunic modeled after an African tribal garment

dash-ing (-in) *adj.* 1. full of dash or spirit; bold and lively 2. showy; striking; stylish —**dash'ing-ly** *adv.*

dash light a light to illuminate a dashboard (sense 2)

Dasht-i-Lut, Dasht-e-Lut (dāsh'tē lōō't) vast desert region of central and SE Iran: c. 800 mi. long

das-sle (dās'sē) *n.* [Afrik.] any of several hyraxes (family Procaviidae) of Africa and the Middle East

das-tard (das'tārd) *n.* [ME., a craven, prob. < Scand. base, as in ON. *dasast*, to become exhausted (cf. DAZE) + ME. -ard, -ARD] a sneaky, cowardly evildoer

das-tard-ly (-lē) *adj.* of, like, or fit for a dastard; mean, cowardly, etc. —**SYN.** see COWARDLY —**das'tard-li-ness** *n.*

da-sym-e-ter (da sim'ē tēr, dā-) *n.* [*<* Gr. *dasy*, dense + *-meter*] a device for measuring the density of gases

das-y-ure (das'ē yoor') *n.* [ModL. *dasyurus* < Gr. *dasy*, thick, hairy + *oura*, tail] any of a family (Dasyuridae) of small Australian marsupials that feed on flesh or insects

dat, **dative**

da-ta (dāt'ā, dat', dāt'-) *n.pl.* [often with sing. v.] [see DATUM] things known or assumed; facts or figures from which conclusions can be inferred; information

data bank an organized, comprehensive collection of detailed data stored on tapes, magnetic discs, etc. for rapid retrieval by computer

da-ta-ma-tion (dā'tā mā'shən) *n.* [DATA + (AUTO)MATION] electronic data processing

data processing the recording and handling of information by means of mechanical or electronic equipment

da-ta-ry (dāt'ār ē) *n., pl. -ries* [ML. *datarius*, official of the Roman chancery < L., to be given away < *datus*, pp. of *dare*, to give] R.C.Ch. 1. the office of the Curia that examines candidates for papal benefices and handles the claims of those with rights to pensions 2. the cardinal in charge of this office

date (dāt) *n.* [ME. < OFr. < L. *data*, fem. of *datus*, pp. of *dare*, to give; the first word in Roman letters, giving the place and time of writing, as *data Romae*, lit., given at Rome] 1. a statement on a writing, coin, etc. of when it was made 2. the time at which a thing happens or is done 3. the time that anything lasts or goes on 4. [Rare] a season or period of time 5. the day of the month 6. a) an appointment for a set time, esp. one for a social engagement with a person of the opposite sex b) such an engagement c) a person of the opposite sex with whom one has such an engagement —**vt.** **date** 1. to mark (a letter, etc.) with a date 2. to find out, determine, set, or record the date of 3. to assign a date to 4. a) to show or reveal as typical of a certain period or age b) to make seem old-fashioned or out of date 5. to reckon by dates 6. to have a social engagement or engagements with —**vi.** 1. to belong to, or have origin in, a definite period in the past (usually with *from*) 2. to have social engagements with persons of the opposite sex —**out of date** old-fashioned; no longer in use —**to date** until now; as yet —**up to date** in or into agreement with the latest facts, ideas, styles, etc. —**dat'a-ble**, **date'a-ble** *adj.* —**dat'er** *n.*

date (dāt) *n.* [ME. < OFr. < L. *dactylus* < Gr. *daktylos*, a date, lit., a finger: so named from its shape] 1. the sweet, fleshy fruit of the date palm 2. same as DATE PALM

date-less (-lis) *adj.* 1. without a date 2. without limit or end 3. too old for its date to be fixed 4. still good or interesting though old

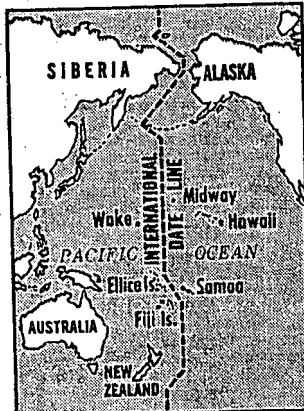
date-line (-lin') *n.* 1. the date and place of writing or issue, as given in a line in a letter, a newspaper, a dispatch, etc. 2. same as DATE LINE —**vt.** **-line**, **-lin'ing** to furnish with a dateline

date line an imaginary line drawn north and south through the Pacific Ocean, largely along the 180th meridian: at this line, by international agreement, each calendar day begins at midnight, so that when it is Sunday just west of the line, it is Saturday just east of it

date palm a cultivated desert palm (*Phoenix dactylifera*) with a stout trunk and large leaves and bearing dates

***dating bar** a bar frequented by persons interested in making casual acquaintances, as for sexual purposes

da-tive (dāt'iv) *adj.* [ME. < L. *dativus*, relating to giving < *datus*, pp. of *dare*, to give; its grammatical use in LL. (*casus*)



INTERNATIONAL DATE LINE

dativus, **dative** (case), translates Gr. *dotikē* designating, or in that case of a noun, pronoun, or adjective which expresses the indirect object of a verb and, in many languages, approach toward something —*n.* 1. the dative case; in English, the dative is expressed analytically by *to* or by word order (Ex.: I gave the book *to* Jack. I gave him the book) 2. a word or phrase in the dative case —**da-tiv-ly** (dā tīv'li) *adj.* —**da-tive-ly** *adv.*

da-to, **dat-** (dāt'ō) *n., pl. -tos* [*<* Malay *datōq*] the chief of a Moslem Moro tribe in the Philippine Islands

da-tum (dāt'əm, dat', dāt'-) *n., pl. dat'a* (-ā) for 2 **datums** [L., what is given, neut. of *datus*; see DATIVE] something known or assumed; fact from which conclusions can be inferred; see also DATA 2. a real or assumed thing used as a basis for calculations or measurements, as a level (also datum plane) from which elevations and depths are measured in surveying

da-tu-ra (dā tyoor'ā) *n.* [Hind. *dhātūrā* < Sans. *dhātura*] 1. any of a genus (*Datura*) of herbs, shrubs, or trees of the nightshade family, which are poisonous and have an unpleasant odor 2. the flower of any of these

daub (dōb) *vt., vi.* [ME. *dauben* < OFr. *dauber*, to whiten, whitewash < L. *dealbare*, to whiten, whitewash < *de*, intens. + *albus*, white] 1. to cover or smear with sticky soft matter, such as plaster, grease, etc. 2. to smear or (plaster, grease, etc.) 3. to paint coarsely or unskillfully —*n.* 1. anything daubed on 2. a daubing stroke or splash 3. a poorly painted picture —**daub'er** *n.*

daub-er-y (-ər ē) *n.* painting done in an inartistic or unskillful manner; also **daub'ry**

Dau-bi-gny (dō bē nyē') Charles François (shārl frānswā') 1817-78; Fr. landscape painter

Dau-det (dō dā') 1. Alphonse (āl fōns'), 1840-97; Fr. novelist 2. Léon (lē ōn'), 1867-1942; Fr. politician & journalist; son of *prec.*

Dau-gav-pils (dō'gāf pēls') city in SE Latvian S.S.R. on the Dvina River; pop. 84,000

daugh-ter (dōt'ēr) *n.* [ME. *doughter* < OE. *dohtor*, akin to Goth. *dauhlar*, G. *tochter* < IE. base **dhugheter*, whence Sans. *dughitr*, Gr. *thugatēr*] 1. a girl or woman as she is related to either or both parents: sometimes also used of animals 2. a female descendant 3. a) a daughter-in-law b) a stepdaughter 4. a female thought of as if in the relation of child to parent (a daughter of France) 5. anything thought of as like a daughter in relation to its source or origin (the colonies are the daughters of the mother country) 6. Physics an element that results immediately from the disintegration of a radioactive element

daughter cell Biol. either of the two cells that result from the division of a cell, as in mitosis

daugh-ter-in-law (-in lō') *n., pl. daugh'ters-in-law* the wife of one's son

daugh-ter-ly (-lē) *adj.* of, like, or proper to a daughter

Dau-mier (dō myā') Ho-nō-ré (ō nō rā') 1809-79; Fr. painter, lithographer, & caricaturist

daunt (dōnt, dānt) *vt.* [ME. *daunten* < OFr. *danter*, *domer* < L. *domare*, to tame < *domare*, TAME] to make afraid or discouraged; intimidate; dishearten —**SYN.** see DISMAY

daunt-less (-lis) *adj.* that cannot be daunted or intimidated; fearless —**daunt'less-ly** *adv.* —**daunt'less-ness** *n.*

dau-phin (dō'fīn; Fr. dō fan') *n.* [Fr., lit., DOLPHIN: used as a proper name by the counts of Vienne, and hence as a title by the oldest son of the king after the province of DAUPHINÉ was ceded to the crown] the eldest son of the king of France: a title used from 1349 to 1830

dau-phine (dō'fēn; Fr. dō fēn') *n.* [Fr., fem. of *dauphin*] the wife of a dauphin: also **dau'phin-ess** (dō'fīn ēs)

Dau-phi-né (dō fē nā') region, formerly a province, of SE France, on the Italian border, north of Provence

daut (dōt, dāt) *vt.* [Scot.] to fondle; pet; caress

Da-vao (dā vou') seaport in the Philippines, on SE coast of Mindanao; pop. 260,000

D'Av-e-nant, Dav-e-nant (dav'ē nānt), Sir William 1606-68; Eng. poet & playwright

Dav-en-port (dav'ən pōrt') [after Col. G. Davenport, 19th cent. fur trader] city in E Iowa, on the Mississippi; pop. 98,000

dav-en-port (dav'ən pōrt') *n.* [*<* ?] 1. a large couch or sofa, sometimes convertible into a bed 2. [Brit.] a small writing desk with a hinged lid

Da-vid (dā'vid) [Heb. *dāvid*, lit., beloved] 1. a masculine name: dim. *Dave*, *Davy*, *Davey*; fem. *David*, *Vida* 2. Bible the second king of Israel and Judah, succeeding Saul and followed by his son Solomon: the reputed writer of the Psalms 3. Saint, 6th cent. A.D.; Welsh bishop; patron saint of Wales: his day is March 1 4. (dā vēd'), Jacques Lou-is (zhāk lwē), 1748-1825; Fr. neoclassical painter

David I 1084?-1153; king of Scotland (1124-53)

Da-vid d'An-gers (dā vēd' dān zhā') (born *Pierre Jean David*) 1789-1856; Fr. sculptor

Da-vid-son (dā'vid s'n), Jo(seph) 1883-1952; U.S. sculptor

da Vin-ci (dā vin'chē; It. dā vēn'chē), Le-o-nar-do (lēō nār'dō; It. leō nār'dō) 1452-1519; It. painter, sculptor, architect, engineer, & scientist

Da-vis (dā'vis) 1. Jefferson, 1808-89; U.S. statesman; president of the Confederacy (1861-65) 2. Richard Henry, 1864-1916; U.S. journalist, novelist, & editor

Davis Strait arm of the Atlantic between Baffin Island, Canada, and W Greenland: c. 200-400 mi. wide

prim-rose (prim'róz') *n.* [ME. *primerose* < MFr., altered (after *rose*, ROSE) < OFr. *primerole*, *primrose* < ML. *primula*, a flower, daisy, *primrose* < L. *primus*, first (see PRIME)] 1. any of a genus (*Primula*) of plants of the primrose family, having variously colored, tubelike corollas with five spreading lobes 2. the flower of any of these plants 3. the light yellow of some primroses 4. any of various other plants, as the evening primrose —*adj.* 1. of the primrose 2. light-yellow 3. designating a family (*Primulaceae*) of plants principally in the N Hemisphere, with flowers borne in clusters on a leafless stem and including loosestrife, primrose, and cyclamen

primrose path [popularized after Shakespeare, *Hamlet*, I, iii] 1. the path of pleasure, self-indulgence, etc. 2. a course of action that is deceptively easy, proper, etc. but that can lead to disaster

prim-u-la (prim'yoo'la) *n.* [ML. same as PRIMROSE (*n.* 1)]

prim-mum mo-bi-le (prēm'moom mō'bē'lē) [ML., first movable thing: see PRIME, *adj.* & MOBILE] *Ptolemaic Astron.* the tenth and outermost concentric sphere, revolving from east to west about the earth as a center and causing all heavenly bodies to revolve with it

Prim-mus (prīm'mās) [arbitrary use of L. *primus*, first: see PRIME] a trademark for a small, portable stove (*Primus* stove), fueled orig. with kerosene but now usually with propane or butane —*n.* [p-] such a stove

prim-mus in-ter-pa-res (prēm'moos in'ter pā'res) [L.] first among equals

prin. 1. principal 2. principally 3. principle

prince (prins) *n.* [ME. < OFr. < L. *princeps*, first, chief, prince < *primo-caps*, lit., first-taken < *primus* (see PRIME) + *capere*, to take] 1. orig., any male monarch; esp., a king 2. a ruler whose rank is below that of king; head of a principality 3. a nonreigning male member of a royal family 4. a) in Great Britain, a son of the sovereign or of a son of the sovereign b) any of various noblemen in other countries 5. a) a preeminent person in any class or group (a merchant prince) b) [Colloq.] a fine, generous, helpful fellow —*prince's-dom* *n.*

Prince Albert [prob. after Prince Albert, later King EDWARD VII] a long, double-breasted frock coat

Prince Albert National Park Canad., national park in C Saskatchewan: 1,496 sq. mi.

prince consort the husband of a queen or empress reigning in her own right

Prince Edward Island island province of SE Canada, in the S Gulf of St. Lawrence: 2,184 sq. mi.; pop. 109,000; cap. Charlottetown: abbrev. P.E.I.

prince-ling (prins'lin) *n.* a young, small, or subordinate prince: also prince/kin (-kin), prince/let (-lit)

prince-ly (-lē) *adj.* -li-er, -li-est 1. of a prince; royal; regal; noble 2. that is a prince 3. characteristic of a prince; liberal; generous 4. worthy of a prince; magnificent; lavish —*prince/li-ness* *n.*

Prince of Darkness an epithet for SATAN

Prince of Peace an epithet for JESUS CHRIST

Prince of Wales title conferred on the oldest son and heir apparent of a British king or queen

Prince of Wales, Cape promontory of the Seward Peninsula, NW Alas., on the Bering Strait: westernmost point of N. America

Prince of Wales Island 1. island of SE Alas., largest in the Alexander Archipelago: 2,230 sq. mi. 2. island in the SC District of Franklin, Northwest Territories, Canada: 12,830 sq. mi.

prince royal the oldest son of a king or queen

prince's-feath-er (prin'siz feh'tər) *n.* a tropical pigweed (*Amaranthus hybridus hypochondriacus*), sometimes grown as a garden flower for its elongated spikes of bristly red flowers

prince's pine same as PIPSISSEWA

prin-cess (prin'sis, -ses) *n.* [ME. *princesse* < MFr.: see PRINCE & -ESS] 1. orig., any female monarch; esp., a queen 2. a nonreigning female member of a royal family 3. in Great Britain, a daughter of the sovereign or of a son of the sovereign 4. the wife of a prince 5. any woman regarded as like a princess, as in gracefulness, aloofness, etc.

prin-cess (prin'sis, prin ses') *adj.* [*<* Fr. *princesse*, a princess] of or designating a woman's one-piece, close-fitting, gored garment, unbroken at the waistline and with a flared skirt: also prin-cess' (-ses')

princess royal the oldest daughter of a king or queen

Prince-ton (prins'tən) [after the Prince of Orange, later WILLIAM III] borough in C.N.J., near Trenton: scene of a battle (1777) of the Revolutionary War in which troops led by Washington defeated the British: pop. 12,000

prin-ci-pal (prin'sa pəl) *adj.* [ME. < OFr. < L. *principalis* < *princeps*: see PRINCE] 1. first in rank, authority, importance, degree, etc. 2. that is or has to do with principal (n. 3) —*n.* 1. a principal person or thing; specif., a) a chief; head b) a governing or presiding officer, specif. of a school c) a main actor or performer d) either of the combatants in a duel 2. any of the main end rafters of a roof, supporting the purlins, which in turn support the ordinary rafters 3. *Finance* a) the amount of a debt, investment, etc. minus the interest, or on which interest is computed b) the face value of a stock or bond c) the main body of an estate, etc., as distinguished from income

4. *Law* a) a person who employs another to act as his agent b) the person primarily responsible for an obligation c) a person who commits a crime or is present as an abettor to it: cf. ACCESSORY 5. *Music* a) any of the principal open stops of an organ b) the soloist in a concert c) the first player of any section of orchestral instruments except the first violins d) the subject of a fugue: opposed to ANSWER —*SYN.* see CHIEF —*prin-ci-pal-ly* *adv.* —*prin-ci-pal-ship* *n.*

prin-ci-pal-i-ty (prin'sə pāl'ə-tē) *n., pl. -ties* [ME. *principalite* < OFr. < LL. *principalitas*] 1. [Rare] the state or quality of being principal or a principal 2. the rank, dignity, or jurisdiction of a prince 3. the territory ruled by a prince 4. a country with which a prince's title is identified

principal meridian a meridian line accurately laid out to serve as the reference meridian in land survey

principal parts the principal inflected forms of a verb, from which the other forms may be derived: in English the principal parts are the present infinitive, past tense, and past participle (Ex.: *drink, drank, drunk; go, went, gone*) The present participle, derived from the present infinitive with the addition of -ing, is sometimes regarded as one of the principal parts

Prin-ci-pe (prin'sə pē'; *Port.* prēm'sə pə) *Port.* island in the Gulf of Guinea, off the W coast of Africa: 54 sq. mi.; pop. 4,500: see SÃO TOMÉ

prin-cip-i-um (prin sip'i-əm) *n., pl. -i-a (-ā)* [L., a beginning < *princeps*: see PRINCE] 1. a principle 2. [pl.] first principles; fundamentals

prin-ci-ple (prin'sə pəl) *n.* [ME., altered < MFr. *principe* < L. *principium*: see prec.] 1. the ultimate source, origin, or cause of something 2. a natural or original tendency, faculty, or endowment 3. a fundamental truth, law, doctrine, or motivating force, upon which others are based (moral principles) 4. a) a rule of conduct, esp. of right conduct b) such rules collectively c) adherence to them; integrity; uprightness (a man of principle) 5. an essential element, constituent, or quality, esp. one that produces a specific effect (the active principle of a medicine) 6. a) the scientific law that explains a natural action (the principle of cell division) b) the method of a thing's operation (the principle of a gasoline engine is internal combustion) —*in principle* as far as the principle is concerned; theoretically or in essence —*on principle* because of or according to a principle

prin-ci-pled (-pəld) *adj.* having principles, as of conduct often in hyphenated compounds (high-principled)

prin-cox (prin'kəks) *n.* [earlier also *princecks* < ? PREEN + *cox*, as in COXCOMB] [Obs.] a coxcomb; fop

prink (prɪŋk) *vt., vi.* [prob. altered (? after PREEN) < PRANK?] same as PRIMP

print (print) *n.* [ME. *prente* < OFr. *preinte* < *print*, pp. of *preindre* < L. *premere*, to press] 1. a mark made in or on a surface by pressing or hitting with an object; impression; imprint (the print of a heel) 2. an object for making such a mark, as a stamp, die, seal, mold, etc. 3. an object or mass that has received such a mark (a print of butter) 4. a cloth printed with a design, or a dress, blouse, etc. made of this 5. the condition of being printed 6. printed lettering 7. the impression made by inked type (uneven print) 8. a picture or design printed from a plate; block roll, etc., as an etching, woodcut, lithograph, etc. 9. printed material (newsprint) 10. a printed publication 11. an edition or printing, as of a book 12. a photograph esp. one made from a negative —*vt.* [ME. *printen*, *printen* < the *n.*] 1. to mark by pressing or stamping; make a print on or in 2. to press or stamp (a mark, letter, etc.) on or in a surface 3. to draw, trace, carve, or otherwise make (a mark, letter, etc.) on a surface 4. to produce on the surface of (paper, etc.) the impression of inked type plates, etc. by means of a printing press 5. to perform or cause to be performed all processes connected with the printing of (a book, etc.), as typesetting, presswork, etc. 6. to publish in print (to print a story) 7. to write in letters resembling printed ones (print the name) 8. to produce (a photograph, or positive picture) from (a negative) 9. in computers, to deliver (information) by means of a printer: often with out 10. to impress upon the mind, memory, etc. —*vi.* 1. to practice the art or trade of a printer 2. to produce an impression, print, photograph, etc. (a negative that prints well) 3. to write in letters resembling printed ones 4. to produce news-papers, books, etc. by means of a printing press —*in print* 1. in printed form; published 2. still being sold by the publisher: said of books, etc. —*out of print* no longer being sold by the publisher: said of books, etc.

print-a-ble (-ə b'l) *adj.* 1. that can be printed or printed from 2. fit to print —*print-a-ble-ty* *n.*

printed circuit an electrical circuit formed by applying conductive material in fine lines or other shapes to an insulating sheet, as by printing with electrically conductive ink, by electroplating, etc.

print-er (-ər) *n.* 1. a person whose work or business is printing 2. a device that prints; esp. a) one that makes copies by chemical or photographic means b) in computers, a device that produces information in printed or type-written form

printer's devil an apprentice in a printing shop

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printery

privity

print-er-y (-ē) *n.*, *pl.* -er-ies *same as* PRINT SHOP (sense 1)
print-ing (-in) *n.* 1. the act of a person or thing that prints
2. the production of printed matter 3. the art of a printer;
typography 4. something printed; printed matter 5.
same as IMPRESSION (sense 7 c) 6. written letters made
like printed ones; lettering

printing press a machine for printing from inked type,
plates, or rolls
print-less (-lis) *adj.* having, making, or leaving no print
or mark

print-mak-er (-mā/kār) *n.* a person who makes prints,
etchings, etc. — **print'mak'ing** *n.*

print-out (-out') *n.* the output of a computer presented in
printed or typewritten form

print shop 1. a shop where printing is done; also **printing**
office 2. a shop where prints, etchings, etc. are sold
pri-or (pri'ər) *adj.* [L., former, superior, compar. of OL.
pri; before: see PRIME] 1. preceding in time; earlier;
previous; former 2. preceding in order or importance;
preferred (a prior choice) — *n.* [ME. < OE. & OFr., both
< ML. (Ec.), a prior < L.: see the *adj.*] 1. the head of a
priory or other religious house 2. in an abbey, the person
in charge next below the abbot — **SYN.** see PREVIOUS
— **pri-or** before in time

Pri-or (pri'ər), Matthew 1664-1721; Eng. poet

pri-or-ate (pri'ər/it) *n.* [ME. < ML. (Ec.) *prioratus* <
L. (Ec.), preference] 1. the rank, office, or term of a
prior; also **pri'or-ship** 2. *same as* PRIORY

pri-or-ess (-is) *n.* [ME. *prioressse* < MFr. < ML. (Ec.)
priorissa; see **PRIOR** & -ESS] 1. the woman head of a priory
of nuns, etc. 2. in an abbey of nuns, the woman in charge
next below the abbess

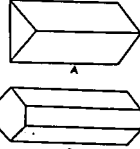
pri-or-i-ty (pri'ər/ē tē, -ār') *n.*, *pl.* -ties [ME. *priorite* <
ML. *prioritas*] 1. the fact or condition of being prior;
precedence in time, order, importance, etc. 2. a) a right
to precedence over others in obtaining, buying, or doing
something b) an order granting this, as in an emergency
3. something given prior attention

pri-o-ry (pri'ər/ē) *n.*, *pl.* -ries [ME. < Anglo-Fr. *priorie*
< ML. *prioria*] a monastery governed by a prior, or a
convent governed by a prioress, sometimes as a subordinate
branch of an abbey — **SYN.** see CLOISTER

Pri-pet (pri'pēt) river in the Ukrainian S.S.R. & Byelo-
russian S.S.R., flowing east through the Pripet (or Pinsk)
Marshes into the Dnepr; c. 500 mi.; Russ. name **Pri-pyat**
(pri'pyät'y')

Pris-cian (prish'an, -ē'an) (L. name *Priscianus Caesar-*
ius) fl. 500 A.D.; Latin grammarian
Pris-cil-la (pri'sil'ə) [L., dim. of *Prisca*, fem. of *Priscus*, a
Roman surname < *priscus*, ancient, primitive, akin to
OL. *pri*; see **PRIME**] a feminine name
prised (priz'əd) *vt.* **prised**, **prising** chiefly Brit. var. of **PRIZE**
(priz'z)

prism (priz'm) *n.* [LL. *prisma* < Gr. *prisma*, lit., some-
thing sawed < *prizein*, to saw < *prizein*,
to saw, bite, akin to Alb. *prish*, (I) de-
stroy, break] 1. *Geom.* a solid figure
whose ends are parallel, polygonal, and
equal in size and shape, and whose sides
are parallelograms 2. a crystalline body
whose lateral faces meet at edges that
are parallel to each other 3. anything
that refracts light, as a drop of water



PRISMS
(A, triangular;
B, hexagonal)

4. *Optics* a) a transparent body, as of
glass, whose ends are equal and parallel
triangles, and whose three sides are
parallelograms; used for refracting or
dispersing light, as into the spectrum
b) any similar body of three or more sides

prism-at-ic (priz mat'ik) *adj.* [*<* Gr. *prisma*, gen. *prismatos*
(see **PRISM**) + *-ic*] 1. of or resembling a prism 2. that
refracts light as a prism 3. that forms or resembles pris-
matic colors 4. many-colored; brilliant; dazzling 5. *same as*
ORTHORHOMBIC — **prism-at'ic-al-ly** *adv.*

prismatic colors the colors of the visible spectrum pro-
duced by passing white light through a prism; red, orange,
yellow, green, blue, indigo, and violet

prism-mold (priz'moid) *n.* [see **PRISM** & -OID] a prismlike
solid figure whose ends are parallel but unequal polygons
and whose sides are consequently trapezoids instead of
parallelograms — **prism-mold'al** *adj.*

pri-son (priz'n) *n.* [ME. < OFr. < L. *prænsio*, for *pre-*
hensio; a taking < *prehendere*, to take: see **PREHENSILE**]
1. a place where persons are confined 2. a building, usually
with cells, where convicted criminals are confined or where
accused persons are held while awaiting trial; specif.,
such a building maintained by a State or the Federal
government: see **PENITENTIARY**, **JAIL**, & **REFORMATORY**

pri-son-er (priz'nār, -nār) *n.* [ME. < OFr. *prisonier*]
1. a person confined in prison, as for some crime 2. a
person held in custody 3. a person captured or held
captive: often in metaphorical usage (a prisoner of love/
prisoner of war a member of the regular or irregular
armed forces of a nation at war held captive by the enemy)

prisoner's base a children's game in which each side has
a base to which captured opponents are brought

***pris-ey** (pris'ē) *adj.* -sl-er, -sl-est [prob. FR (IM) +
(S)ISSY] [Colloq.] very prim or precise; fussy, prudish, etc.
— **pris'ei-ly** *adv.* — **pris'ei-ness** *n.*

pris-tine (pris'tēn, -tin; pris'tēn') *adj.* [L. *pristinus*,
former < OL. *pri*, before: see **PRIME**] 1. characteristic of
the earliest, or an earlier, period or condition; original
2. still pure or untouched; uncorrupted; unspoiled (*pristine*
beauty) — **pris'tine-ly** *adv.*

prith-ee (prith'ē) *interj.* [altered < *pray thee*] [Archaic]
I pray thee; please

priv. 1. private 2. privative

priv-a-cy (priv'ə sē; Brit. also priv'ə-) *n.*, *pl.* -cies [ME.
privacie; see **PRIVATE** & -CY] 1. the quality or condition
of being private; withdrawal from public view or company;
seclusion 2. secrecy [told in strict *privacy*] 3. one's
private life or personal affairs (an invasion of one's *privacy*)

***Pri-vat-do-cent** (pri vāt'dō tsent') *n.*, *pl.* -cent'en (-ən)
[G. < *privat*, private + *docent*, *dosent*, teacher: see **DOCENT**]
in German universities, an unsalaried lecturer paid only
by his students' fees; also sp. **Pri-vat'do-zent'**, *pl.* -zent'en

priv-a-te (priv'it) *adj.* [ME. *prywat* < L. *privatus*, belonging
to oneself, not to the state < *privare*, to separate, deprive
< *privus*, separate, peculiar, prob. akin to OL. *pri*; see
PRIME] 1. of, belonging to, or concerning a particular
person or group; not common or general (*private* property,
a *private* joke) 2. not open to, intended for, or controlled
by the public (a *private* school) 3. for an individual person
(a *private* room in a hospital) 4. not holding public office
(a *private* citizen) 5. away from public view; secluded
(a *private* dining room) 6. not publicly or generally known;
secret; confidential (a *private* matter) 7. carried out or
done on an individual basis (*private* medical practice) 8.
engaged in work independent of institutions, organiza-
tions, agencies, etc. (*private* detective, *private* tutor) — *n.*

1. [*pl.*] the genitals: also **private parts** 2. an enlisted man
of either of the two lowest ranks in the U.S. Army or of
the lowest rank in the U.S. Marine Corps — **in private**
privately or secretly; not publicly — **priv-a-te-ly** *adv.*

private enterprise *same as* FREE ENTERPRISE

priv-a-teer (priv'ə tir') *n.* [*<* **PRIVATE** + -**EE**] 1. a
privately owned and manned armed ship commissioned
by a belligerent government to attack and capture enemy
ships, esp. merchant ships 2. a commander or crew member
of a privateer: also ***pri'va-teers'man** (-mən), *pl.* -men

— *vi.* to sail on or as a privateer

***private eye** [Slang] a private detective

***private first class** an enlisted man ranking just below
a corporal in the U.S. Army and just below a lance corporal
in the U.S. Marine Corps; abbrev. **Pfc.**, **PFC**

private law that branch of the law dealing with the re-
lationships of private individuals to one another: cf.
PUBLIC LAW

priv-a-tion (priv'ə shən) *n.* [ME. *privacion* < L. *privatio*
< *privare*; see **PRIVATE**] 1. a depriving or being deprived;
deprivation; specif., the loss or absence of some quality
or condition 2. lack of the ordinary necessities or comforts
of life; want

priv-a-tism (priv'it iz'm) *n.* concern only with one's
private life and personal involvements rather than with
public affairs, social values, etc. — **priv'at-ist**, **priv'at-ist'ic**
adj. — **priv'at-i-za'tion** *n.* — **priv'at-ize'** (-tiz') *vt.* -tized',
-tiz'ing

priv-a-tive (priv'ə tiv) *adj.* [L. *privativus* < pp. of *privare*:
see **PRIVATE**] 1. depriving or tending to deprive 2.
characterized by a taking away or loss of some quality
3. *Gram.* indicating negation, absence, or loss — *n.* a
privative term or affix, as *a-*, *un-*, *non-*, or *less* — **priv-**
a-tive-ly *adv.*

priv-et (priv'it) *n.* [*<* ?] any of a genus (*Ligustrum*) of
shrubs or trees of the olive family, with bluish-black
berries and spikes of white flowers, often grown for hedges;
esp., the common privet (*Ligustrum vulgare*)

priv-i-lege (priv'ij, priv'ij) *n.* [ME. < OFr. < L.
privilegium, an exceptional law for or against any indi-
vidual < *privus*, **PRIVATE** + *lex* (gen. *legis*), a law] 1. a
right, advantage, favor, or immunity specially granted to
one; esp., a right held by a certain individual, group, or
class, and withheld from certain others or all others
2. a basic civil right, guaranteed by a government (the
privilege of trial by jury) 3. an option, as a put, call, etc.,
to buy or sell a stock — *vt.* -leged, -leg-ing to grant a
privilege or privileges to

priv-i-leged (-lijd) *adj.* having one or more privileges

privileged communication *Law* 1. a communication that
one cannot legally be compelled to divulge, as that to a
lawyer from his client 2. a communication made under
such circumstances, as in a legislative proceeding, that it
is not actionable as slander or libel

priv-i-ty (priv'ə tē) *n.*, *pl.* -ties [ME. *privete* < OFr. < L.
privus, **PRIVATE**] 1. a) private or secret knowledge, as
shared between persons b) participation in this 2. *Law*
a successive relationship to or mutual interest in the same
property or rights, established by law or legalized by

car; ten, even; is, bite; gō, hōm, tōl, look; oil, out; up, fur; get; joy; yet; chin; she; thin, then; zh, leisure; ŋ, ring;
in ago, e in agent, i in sanity, o in comply, u in focus; * as in able (ā'b'l); Fr. bāl; ē, Fr. cœur; ô, Fr. feu; Fr. mon; ô, Fr. coq;
duc; r, Fr. cri; H, G. ich; kh, G. doch. See inside front cover. * Americanism; † foreign; * hypothetical; < derived from



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your kitchen windows) — in print 1 chiefly dial : to the

to print it sir/n print—Shak. 2 : procurable from the publisher — used esp. of a book — out of print : not procurable from the publisher or from ordinary book sources because the printed edition has been exhausted — used esp. of a book
print *v* /prɪnt/ -ɪŋ/ -ɪŋs/ [ME *printen*, *prenten*, fr. *printer*, *prente* print *v* 1 a : to make an impression in or upon : mark with a print (two small light feet that barely ~ed the soft soil) (fresh butter worked, salted, and ~ed) b : to cause (as a mark) to be stamped ; make (an impression or mark) by or as if by pressure (~ his seal in wax) c : to apply pressure with (as a stamp of the foot) so as to leave an impression 2 a : to make a copy of by impressing against a blank surface (a photograph made by ~ing) b : to make a copy of by means of a printing process (~ing columned pages) (~ bank notes, ~ed) — often used with *up* b : to perform or cause to be performed — all or some of the operations necessary to the production of (as a publication, a piece of printed matter, a picture) (~ greeting cards) (~ an edition of a newspaper) c : to impress (as a mark) on wallpaper or cloth with a design or pattern (~ cloth with a linoleum blocks) (~ air-dried toilet paper is easy to ~) (*Graphic Arts Monthly*): impress (a pattern or design) or something (~ed gay foliage on sheer linen) d : to publish in a print (‘all the news that’s fit to ~’ — *N.Y. Times*) 3 : to form manually in unjoined characters resembling those of ordinary type (~ the name and address clearly) 4 a : to make a positive picture on sensitized photographic paper, film, plate, or other material from a negative or positive ~ vi 1 a : to use or be used in the art of typography : work as a printer b : to produce printed matter (the new rotary press ~s very rapidly) c : to make a printed copy (badly worn type ~s poorly) d : to be susceptible of printing (this paper ~s badly) 2 a : to write or hand-letter in imitation of unjoined or ~ characters (*a*) a *firearm or a bullet* : to puncture a paper target (*b*) a *bullet* : the quality or state of being pointed (*c*) a *bullet* : the condition (the ~ of a story) (~ of type) **print-able** /prɪntəbəl/ *adj* 1 : capable of being printed or being printed from (~ paper) (*a* ~ halftone) 2 : considered fit to print or publish because free from matter that is morally or legally objectionable
print-a-nyā /prɪntˈɒniə/ or **prin-ta-niā** -niē *adj* [*printer*, *printer* fr. *printer* *v* + *MF* *pr*, *printems* spring (fr. *prin* prime + *tempus* time) + *MF* *tempus* — + *-er* -er] *adj* 1 : made or dressed with diced spring vegetables (*a* ~ soup) 2 : made or dressed with diced spring vegetables (*a* ~ soup)
printcloth /ˈprɪntˌkloʊθ/ *n* (*print* + *cloth*) : plainwoven cotton goods suitable for converting into white fabrics (as muslin or cambric), for printing as dress or drapery goods, or for use in bagging
print down *v* : to transfer the image from a photographic negative to a printing plate (as in photo-offset or gravure)
printer /ˈprɪntər/ *n* 1 : a circuit for electronic apparatus made by depositing conductive material in continuous paths from terminal to terminal on an insulating surface 2 : a person who prints printed matter *n* : matter that is printed by any of various mechanical processes (as letterpress, lithography) and is eligible for mailing at a special rate of postage and is specifically excluded from the postage reduction regulation which applies to carbon and copying-press copies
printer's page *n* : published writing — used with the (in the importance of the printed page in backward areas)
printed paper *n* 1 : a class of mail in the United Kingdom which comprises printed matter exclusive of newspapers, and exceeds two pounds in weight 2 **printed paper** *n* : printed matter in international mail, including printed paper but not including newspapers, having different weight limits — compare **commercial papers**
printer's /ˈprɪntər/ *n* -s 1 : one whose work is printing : a : one that is engaged in the art or business of printing (a small commercial ~) ; esp : a practitioner of one of the constituted skilled printing crafts (as a compositor or pressman) and who decorates materials (as used in printing or to print reproductions) 2 : a device containing a light source for exposing sensitive photographic material to light transmitted through a negative or positive that is either held in contact with the material (as in making a contact print) or that is not in contact with it so that a lens is used to project the image and the material (as in making a projection print) 3 : a device which either by motion-picture projection or by means of a light machine prints by means of contact with a negative or positive or vice versa either by contact or by typical projection b : an instrument that transmits a telegraphic message at the receiving end of a printed characters
printer's block *n* *pl* but *sing* or *pl* in constr [*fr.* *pl.* of earlier *printer* *printer*, *printer* fr. *print* + *-er*] *Brit* : **PRINTCLOTH**
printer's devil /ˈprɪntər-ˈdɛvɪl/ *n* [prob. so called fr. his becoming often black with ink] : a young apprentice or ‘brandy boy’ in a printing office
printer's ink *n* 1 : ink for use in printing ; esp : one of the series of quick-drying black inks ordinarily used in letterpress and offset printing 2 : printed matter (the power of *printer's* ink) **printer's mark** *n* : **IMPRINT** (b2)
printer's reader *n*, chiefly *Brit* : **PROOFREADER**
printer's ream *n* : a ream of 51 sheets
printer's waste *n* : material supposed to be destroyed by the printing office
printing /ˈprɪntɪŋ/ *n* -es (*print* + *-ery*) 1 : **PRINTING OFFICE** 2 : the process of producing printed matter by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 1 a : reproduction (as on paper or cloth) of an image from a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) b : the process of making typically by a contact impression that transfers the image of an ink — compare **LETTERPRESS**, **PHOTOCOPYING**, **PHOTOGRAPHY**, **STENCIL**, **ELECTROGRAPHY**, **PHOTODUPLICATION** 2 : the process of producing a positive image of a graphic image on a light-sensitive material from a negative or positive by contact or projection : the process of making photographic prints c : the process or act of decorating pottery by means of transfer papers printed with mineral colors or of gelatin sheets printed in oil with the colors transferred by firing 2 : the art, practice, or business of a printer 3 : the number of copies of a printed matter (as a book) printed in one contact : paper to be printed on
printing frame *n* : a holder in which a photographic negative or positive is held in uniform close contact with sensitized material for exposing the latter to light in order to make a photographic print
printing-in /ˈprɪntɪŋ-ɪn/ *n* -s 1 : a process by which different colors or other features not in the original negative are introduced into a photograph by the use of a special negative or positive 2 : the process of printing pigments of the required color mixed with oil or varnish ; esp : a black ink made from carbon blacks and linseed oil or some similar oil often with rosin oil and rosin varnish added
printing machine *n*, chiefly *Brit* : a power-driven printing press
printing office *n*, business : establishment in which printing (as of books, newspapers) is done
printing-out /ˈprɪntɪŋ-ˌaʊt/ *adj* : relating to, used in, or being the process of photographic printing in which the image is first brought out by the direct action of light without subsequent development by means of chemicals (*printing-out* process requires fixing and toning to make the image permanent) — give if a satisfactory result is made 4b(1), 4b(2), 4b(3)
printing press *n* : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 1 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 2 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 3 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 4 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 5 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 6 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 7 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 8 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 9 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 10 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 11 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 12 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 13 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 14 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 15 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 16 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 17 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 18 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print — more at **PRINT**) 19 : a machine that produces printed copies of text or images (as by means of a printing process, *printing*, *prenting*, fr. *gerund* (*printen*, *prenten* to print —

pris-cil-la \prɪ'sɪlə/ *n* -s *sometimes cap* [*fr. Priscilla, a feminine name*] : one of a pair of ruffled curtains with short ruffled valance attached and with tiebacks of the same material

pris-cil-lian \prɪ'sɪliən/ *n* -s *usu cap* [*back-formation fr. priscillianism*] : **PRISCILLIANIST** 1

pris-cil-lian-ism \-yoʊˌnɪzəm/ *n* -s *usu cap* [*Priscillian* *A.D.* 385 *Span. religious reformer + E -ism*] : the teachings of Priscillian, bishop of Avila, who was condemned, put to torture, and beheaded with four companions on charges of heresy involving leanings toward Manichaeism, docetism, and modalism — *see* **PRISCILLIANIST** 1

pris-cil-lian-ist \-yənst/ *n* -s *usu cap* [*Priscillian* *A.D.* 385 + *E -ist*] 1 : an adherent of Priscillianism or a follower of Priscillian 2 [*Priscilla, prophetess associated with the founder of Montanism + E -ist*] : **MONTANIST**

priscillianist \-lɪ/ *adj, usu cap* : of or relating to the Priscillianists or their beliefs

prism *verb of MATRZ*

pris-ere \prɪ+ + *n* [*primary + ere (cycle)*] : the succession of vegetational stages that occurs in passing from bare earth or water to a climax community — *compare* **SUBSERE**

pris-lad-ka or **pris-jad-ka** \prɪ'sɪldkə/ *n* -s [*Russ prislyadka*] : a Slavic male dance step executed by extending the legs alternately forward from a squatting position

prism \ˈprɪzəm/ *n* -s [*LL prisma, fr. Gk, anything sawn, prism, fr. prelin to saw pristes saw*; akin to *Gk pristin* sawfish and *perh. to Alb to break, spoil*] 1 *a* : a polyhedron having two faces that are polygons of parallel planes while the other faces are parallelograms — *see* **VOLUME** table *b* : something shaped like such a solid figure; *specif* : the volume of water in a stream in motion considered as a prism of chosen length in conjunction with the cross section of the channel 2 *a* : a transparent body bounded in part by two plane faces that are not parallel used to deviate or disperse a beam of light similarly used for a electric or magnetic field *b* : something that refracts light or produces an effect suggestive of a spectrum; *specif* : a more or less prism-shaped decorative glass luster (as for a chandelier) 3 *a* : a crystal form whose faces are parallel to one axis; *specif* : one whose faces are parallel to the vertical axis — *compare* **DOME** *b* : a crystal form whose number of faces is three or more and whose intersection edges are all parallel

pris-mal-ic \-zməl/ *adj* : **PRISMATIC**

pris-mat-ic \-prɪzˌmɑdˌɪk-, -atɪ, [ɛk/ *adj* [*F prismatique, fr. Gk prismat-, prisma prism + F -ique -ic*] 1 : of, relating to, or resembling, or consisting a prism (*a* ~ form or cleavage) (~ lusters on a chandelier) 2 : formed by a prism; resembling the colors formed by the refraction of light through a prism (~ effects) (~ spectrum colors) *b* : consisting of prisms (~ soil aggregates) 3 : resembling a prism or its refraction of light (*a* ~ book, sharply faceted, receiving light from many aspects and refracting the actual into the prophetic — Warren Beck) 4 : highly colored : **BRILLIANT, SHOWY (the life)** (~ splendor) 4 : having such symmetry that a general form with faces cutting all axes at unspecified intercepts is a form with faces of a class of crystals with the highest symmetry in the monoclinic system

pris-mat-ic-al \-lɪkəl, [ɛk-/ *adj, archaic* [*Gk prismat-, prisma + E -ical*] : **PRISMATIC**

pris-mat-ic-al-ly \-lɪkəlɪ, [ɛk-, -lɪ/ *adv* : in a prismatic manner : so as to be prismatic : as if refracted by a prism

prismatic astrolabe *n* : a portable instrument consisting of a small telescope, a 60-degree prism, and a mercury reflecting basin by which determinations of time, latitude, and azimuth may be obtained from star observations

prismatic coefficient *n* : the ratio of the volume of displacement of a ship to that of a prism equal in length to the distance between perpendiculars of the ship and in cross section to that of the immersed midship section

prismatic compass *n* : a surveyor's hand compass provided with a triangular glass prism so adjusted that the compass can be read while taking a sight

prismatic glass *n* : **PRISM GLASS**

prismatic layer *n* 1 *also* **prismatic tissue** : a layer of secondary tissue developed internally by the cambium of some lycophytes (as the quillworts) and interpreted as xylem, phloem, or both 2 : the middle layer of the shell of a mollusk *conspicuously* consisting of calcium carbonate arranged in prisms

prismatic reflector *n* : a totally reflecting prism that is *usu.* right-isosceles in form

prismatic spectrum *n* : **PRISM SPECTRUM**

pris-ma-tize \ˈprɪzməˌtɪz/ *v* -ED/-ING/-S [*prismatic + -ize*] : to alter into prisms (*prismaticized lava*)

pris-ma-toid \-tɔɪd/ *n* -s [*NL prismatoides, fr. Gk prismat-, prisma prism + L -oides -oid*] : a polyhedron having all of its vertices in two parallel planes — **pris-ma-toid-al** \-tɔɪdəl/ *adj*

prism binocular *n* : a binocular with shortened telescopic tubes in each of which light rays entering through the objective lens are reflected by two Porro prisms before passing through the eyepiece where finally an erect virtual image is formed — *often* used in pl.; *compare* **FIELD GLASS**

prism diopter *n* : an arbitrary standard of prismatic deflection equal to that of a prism that deflects a beam of light one centimeter on a plane placed at a distance of one meter

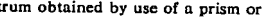
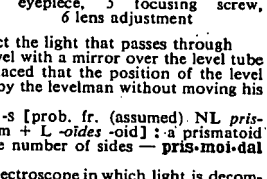
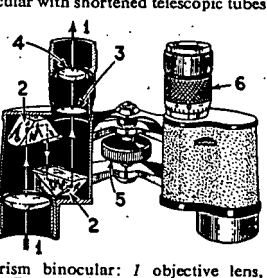


prism glass *n* : glass with one side smooth and the other side edged into sharp edges joined so as to reflect the light that passes through

prism level *n* : a dumpy level with a mirror over the level tube and a pair of prisms so placed that the position of the level bubble can be determined by the levelman without moving his head from the eyepiece

pris-moid \ˈprɪzˌmɔɪd/ *n* -s [*prob. fr. (assumed) NL prismatoides, fr. LL prisma prism + L -oides -oid*] : a prismatoid whose bases have the same number of sides — **pris-moid-al** \-mɔɪdəl/ *adj*

prism spectroscope *n* : a spectroscope in which light is decomposed by a single prism

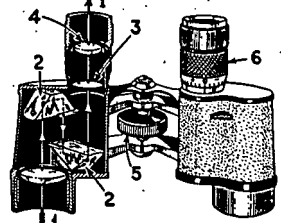
prism spectrum *n* : a spectrum obtained by use of a prism or train of prisms



priscillas



prisms 1 a



prism binocular: 1 objective lens,
2 Porro prism, 3 concave lens,
4 eyepiece, 5 focusing screw,
6 lens adjustment

[illegible]

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dashpot *Mechanical Engineering*. a device that is used to damp the vibration or control the motion of a mechanism; it consists of a piston that is connected to the component to be controlled and slides within a liquid-filled cylinder.

Dasyaceae *Botany*. a small family of marine red algae of the order Ceramiales, characterized by terete or flattened, branched uniaxial thalli and spermatangia that occur in great quantities on special axes.

Dasycladaceae *Botany*. a family of coenocytic green algae in the order Dasycladales, characterized by a central stem from which whorls of filaments develop.

Dasycladales *Botany*. an order of marine algae in the division Chlorophyta, characterized by a lime-encrusted thallus composed of nonseparate, extensively branched tubes.

dasymeter *Physics*. an instrument commonly used to determine the density of a gas.

Dasyonygidae *Invertebrate Zoology*. a family of biting lice, found only on hyraxes and similar rodents.

Dasypodidae *Vertebrate Zoology*. the armadillos, a family of mammals of the order Edentata.

Dasytidae *Invertebrate Zoology*. a large family of predatory and pollen-eating beetles. Also, MELYRIDAE.

Dasyuridae *Vertebrate Zoology*. a family of small, mainly nocturnal carnivorous marsupials of the order Marsupicarnivora, native to Australia, New Guinea, and Tasmania and including the native cats, pouched mice, banded anteater, Tasmanian devil, and related forms.

Dasyuroidea *Vertebrate Zoology*. a superfamily that is made up of the families Dasyuridae, Notoryctidae, Thylacinidae, and Mymecobiidae; marsupials in which the marsupium, if present, opens posteriorly, the second and third digits of the hind feet are didactylous, and the tails are nonprehensile.

DAT digital audiotape.

data [dā'tā; dā'tā] the plural of **datum**. *Science*. 1. two or more individual facts or pieces of information. 2. a body of facts, information, or knowledge, particularly when derived from scientific observation or experimentation. *Computer Programming*. 1. a group of one or more characters (alphanumeric, binary, or other), representing basic elements of information that can be processed or produced by a computer. 2. the representation of facts, numbers, or concepts that can be communicated, stored, and processed to form information. Used to form many compound terms, such as **data analysis**, **data collection**, **data distribution**, **data preparation**, **data sharing**, **data transmission**, and so on.

Data, although originally a plural form, is now often regarded as a collective term and used with a singular verb, especially in computer fields (e.g., "Data is often stored on backup disks."). In certain academic contexts, however, a plural verb is still preferred (e.g., "The experimental data are not conclusive.").

data abstraction *Computer Programming*. 1. a method of simplifying programming by restricting the knowledge of the data structure to the program module that creates the data type. 2. a description of the properties of a class of related data types.

data acquisition *Computer Programming*. any accumulation of data for some later use, such as processing or analysis. *Telecommunications*. specifically, a facility or program used to gather data from a group of addressees, to assemble data within a communications system, and to deliver data in the form of messages to specified addresses.

data-acquisition computer *Computer Technology*. a computer system used to capture data generated by instruments; it usually consists of analog and/or digital inputs, analog-to-digital converters, disk or tape data storage, CPU, main memory, and an operator console.

data aggregate *Computer Programming*. a named collection of data items within a record; either a list or a repeating group.

data area *Computer Technology*. a contiguous area of main storage, specified by its base address and size. Data within the area is referenced by the base address of the area and the offset of the data within the area.

data attribute *Computer Programming*. a characteristic of a set of data, such as data type or field length.

data automation *Computer Technology*. the application of computers to gathering, storing, processing, and disseminating data and information.

data bank *Computer Programming*. a comprehensive collection of data derived from a variety of sources and stored so that it is available to a number of users.

database *Computer Programming*. an integrated collection of data that supplies information in a variety of forms or for a variety of applications. Also, **data base**, **data-base**.

database administrator *Computer Technology*. the person or group of people responsible for the definition, control, and use of an organization's database.

database machine *Computer Technology*. a special-purpose add-on computer system dedicated to performing database functions.

database management system *Computer Programming*. a collection of special-purpose programs that support and maintain the semipermanent storage of user-owned data; includes the software necessary for storage, retrieval, inquiry, and reporting.

database publishing *Computer Science*. the publication of information from a computer database, in the form of a directory, reference book, or the like.

database server *Computer Programming*. the software that provides access to a database for entering, updating, or deleting data.

data break *Computer Technology*. a facility that permits data input or output without interrupting program operation.

data buffering *Computer Technology*. 1. the temporary gathering and storage of data in high-speed memory so that it will be available when needed for processing. 2. the temporary storage of input or output data to allow transfer of data between two devices that operate at different rates.

data bus *Computer Technology*. a link that allows data to be exchanged between the CPU, main memory, and an input/output device.

data capture *Computer Programming*. the gathering or collecting of input data for processing, especially later processing for purposes other than that for which it was originally entered.

data carrier *Computer Technology*. any medium used to contain and physically transport data, such as magnetic tape reels, magnetic disks, or punched cards. Thus, **data-carrier storage**.

data cartridge *Computer Technology*. a removable cartridge that contains permanently recorded data.

data catalog *Computer Programming*. a complete list of the full names of all the data elements used by an organization.

data cell *Computer Technology*. 1. the smallest representation of data, usually one bit. 2. a high-capacity auxiliary storage medium in which data is recorded onto magnetic strips arranged in cells.

data cell drive *Computer Technology*. a soft-surface direct access storage device, now used only for very large on-line databases, that selects and extracts the desired strip from the magazine and wraps it around a read/write drum; after processing, the strip is automatically peeled off the drum and returned to the magazine.

data center *Computer Technology*. an area containing automatic data processing equipment and personnel who centralize and control data processing services for others in the organization; usually managed as a separate organizational entity. Also, **DATA-PROCESSING CENTER**.

data chain *Computer Programming*. two or more data elements, words, or codes that are linked in a way that provides meaningful information.

data chaining *Computer Programming*. the storage or retrieval of elements of a physical record in or from more than one memory location by means of individual I/O commands. One I/O buffer may be chained to the next so that when the first buffer is filled, the I/O channel will automatically switch to the next buffer without losing data.

data chamber *Photogrammetry*. the portion along the margins of an aerial photograph where ancillary data, such as the time, altitude, frame number, and other information required for identification and correlation, are recorded.

data channel *Computer Technology*. a bidirectional data path between a processor and input/output devices. Also, **INPUT/OUTPUT CHANNEL**, **READ-WRITE CHANNEL**.

data circuit *Electronics*. a radio or wire communication system specifically designed for transmission of digital data.

data code *Computer Programming*. any character or short group of characters used to represent data according to a set of rules; often used to reduce data storage requirements.

data communication control character see **TRANSMISSION CONTROL CHARACTER**.

data communications *Computer Technology*. the use of communication lines to handle the flow of digital data between computers.

data-communications network *Computer Technology*. a means of transmitting data from one location to another, consisting of a set of nodes, such as computers, terminals, or communication control units, and communication lines connecting the nodes.

data-communications processor *Computer Technology*. a processor that controls the transfer of data between a computer system and a network via communication lines.

data compaction

data compaction *Computer Programming.* an irreversible form of data compression such as eliminating leading zeros or trailing blanks.

data compression *Computer Programming.* a technique used to reduce data storage or communication requirements by altering the form of data to reduce the number of bits required to represent a given set of information.

data concentrator *Computer Technology.* a small computer that is programmed to accept traffic from a number of lines and place it on a common line or to distribute traffic from the common line to remote terminals. Also, **CONCENTRATOR**.

data control *Computer Technology.* a service performed by personnel at a computing center in conjunction with quality control and computer resources scheduling.

data conversion *Computer Programming.* the process of transforming data files from one coding system to another or from one storage medium to another.

data declaration *Computer Programming.* a programming language statement that indicates the data type of a variable used in the program and allows proper interpretation of the variable when it is accessed.

data definition *Computer Programming.* a program statement that provides attributes of the data to be processed, including its size and type.

data-dependence graph *Computer Programming.* a graphical representation of a program in a dataflow language, with each node representing a function and each arc carrying a value.

data descriptor *Computer Programming.* a pointer to a data segment in memory containing the address of the beginning of the array and the number of elements.

data-description language *Computer Programming.* a language associated with a database management system and a host high-level programming language such as FORTRAN, used to specify the way that data is to be stored and maintained in a database. Also, **data-definition language**.

data dictionary *Computer Programming.* a catalog that provides name, structure, and usage information for all data types stored in a database.

data directory *Computer Programming.* lists or tables that provide quick reference to relevant information about the data used by an information system, such as name and attributes; usually accompanies a data dictionary.

data display *Computer Technology.* the on-line visual representation of data; usually on a CRT screen or other video terminal under control of a computer.

data division *Computer Programming.* the section in a COBOL program that contains statements defining all the data to be processed by the program.

data-driven execution *Computer Programming.* the processing of a program in a dataflow system in which the arrival of data at an action operator triggers the execution of that action.

data-driven search *Artificial Intelligence.* a search in which the arrival of data causes conclusions to be drawn, which cause further conclusions, and so on; forward chaining.

data element *Computer Programming.* the smallest unit of named data within a record, file, or database; the smallest unit of data that has informational meaning.

data encryption *Computer Programming.* the coding of classified or sensitive data by a predetermined technique in such a way as to be uninterpretable without decryption information.

data entry *Computer Programming.* the process of converting data from human readable form, such as time cards or sales slips, into computer readable form.

data-entry terminal *Computer Technology.* a device with a keyboard and a data display used by keyboard operators to transcribe data from source documents directly into a computer, or onto a disk or tape.

data error *Computer Programming.* a common type of computer error, caused by erroneous data entry.

data-exchange system *Computer Technology.* a data communication system consisting of hardware devices and data-transmission software that accepts data from one or more sources, sorts and prioritizes the data, and transmits it to one or more destinations.

data expansion *Computer Programming.* the return of compressed data to its original length and form.

data export *Computer Programming.* the process of obtaining data from one program, such as a database, in a form that is acceptable to another program, such as a spread sheet or a word processor.

data field *Computer Programming.* a space allocated to a data element on a physical record.

dataflow or **data flow** *Computer Programming.* a method of describing a process in terms of actions that are controlled by the arrival of data at the action operator, as opposed to control flow models that are based on instruction pointers. Thus, **dataflow analysis**.

dataflow diagram *Computer Programming.* a modeling tool used to represent a system that is automated, manual, or a combination of both, in which the four components (dataflow, process, data store, and data originator/terminator) are graphically represented.

dataflow language *Computer Programming.* a modeling language used to describe the information paths in programs in which parallel or asynchronous processes occur.

dataflow system *Computer Technology.* a computer system in which basic operations are initiated by the availability of the operands instead of by the sequential flow of control. Also, **NON-VON NEUMANN ARCHITECTURE**.

dataflow technique *Computer Technology.* an approach to computer systems organization and design that specifies the movement of data through the system and the transformations that occur, as opposed to a traditional system design using process or control flow.

data formatting *Computer Programming.* the use of programming language statements to specify the way data to be used in the program is held in the file, including the data type and field length.

data frame *Computer Technology.* see **FRAME**.

data-handling system *Computer Technology.* a group of automatic or semiautomatic devices that collect, transmit, receive, and store data in digital form; often used with instrumented data collection devices.

data hierarchy *Computer Programming.* a data structure that defines succeeding more detailed or lower-ranking subsets.

data import *Computer Programming.* the ability to read and use information produced by another program or database management system.

data independence *Computer Programming.* the abstraction of data from the processing so that a change in the logical or physical structure of the data has no effect on the application program's view of the data.

data integrity *Computer Programming.* the quality of data that is complete, accurate, and consistent.

data-intense application *Computer Programming.* the use of a computer system involving large volumes of data and repetitive transaction processing.

data interchange *Computer Programming.* the accessibility of data from one program to a separate program, using software standards for data representation.

data-interchange format *Computer Technology.* a standard data representation that permits data from one program to be accessible to another.

data item *Computer Programming.* a single unit of data; the smallest unit of named data. Also, **DATUM**.

data level *Computer Programming.* a reference number used to indicate to a compiler the position or rank of a data element in a hierarchical data structure.

data library *Computer Programming.* a catalog of all the disks, tapes, documentation, user's manuals, and procedures that are relevant to using data resources.

data link *Computer Technology.* the terminal installation and interconnecting circuits that permit the exchange of information directly between two different stations. *Telecommunications.* a pair of data stations and their connecting network, operating in such a manner that information can be exchanged between them.

data link layer *Computer Technology.* layer 2 of the seven-layer Open System Interconnection (OSI) model for network architectures; manages the transmission circuit, transforms data bits into data frames, transmits the frames, and processes acknowledgment frames in return.

data logging *Computer Programming.* a recording of digitized analog data, digital data, and clock data to form a record of data values over time.

data management *Computer Programming.* a general term referring to system functions that maintain and provide access to stored data, including access to storage hardware, enforcement of data storage conventions, and regulation of the use of input/output devices; usually concerns data only during a program's execution as opposed to database management that is concerned with more lasting or complex data. Thus, **data management program**.

data manipulation *Computer Programming.* a general term referring to the functions required to process data in order to make further use of it, including sorting, merging, editing, and summarizing. Thus, **data manipulation language**.

datamation *Computer Technology.* automatic data processing. (From *data automation*.)

data medium *Computer Technology.* any material on which data can be physically stored, such as a magnetic tape or disk.

data model *Computer Programming.* a graphic database design tool used to represent the properties of stored data and their relationships to each other, independent of software, hardware, or performance considerations.

data name *Computer Programming.* a symbolic name that a programmer assigns to a variable or constant used in a program.

data organization *Computer Technology.* the physical and spatial arrangement of records in storage; examples include sequential, indexed sequential, partitioned, and direct.

data packet *Computer Technology.* a relatively small unit of data transmitted over a packet switching network as part of a message that is sent from one computer to another.

data patch panel *Telecommunications.* a sequence of a patch bay, such as a board, panel, or console, in which circuits are terminated in jacks mounted on the surface; the other end of the circuit is connected to various points in a communication system to permit interconnection, monitoring, or testing via the jacks.

data plotter *Computer Technology.* an output device that provides hardcopy graphics or pictorial representations of computer-processed data, usually as line drawings.

data processing or **data-processing** *Computer Technology.* a general term referring to any operations performed on data by a computer system, in accordance with specified rules and procedures.

data-processing center see DATA CENTER.

data processor *Computer Technology.* 1. any device used to perform operations on data. 2. a person involved in performing such operations.

data protection *Computer Technology.* the application of procedures and safeguards to prevent deliberate or accidental data loss or damage, or the access of unauthorized persons to sensitive, classified, or private data. Also, DATA SECURITY.

data purification *Computer Programming.* an attempt to screen the maximum number of errors from a set of input data prior to submission for processing.

data rate *Computer Technology.* the speed at which circuits or devices transmit digital data, usually measured in bits per second. Also, **data transfer rate**.

data record *Computer Programming.* an organized and identifiable set of data elements that are related in some way. Also, RECORD.

data reduction *Computer Programming.* the process of obtaining only the useful data from a larger set of data through computation, summarization, aggregation, or other abstracting methods. Also, REDUCTION.

data redundancy *Computer Programming.* the replication of specific data item values in more than one file within a database.

data register *Computer Technology.* a buffer register in the CPU used to hold a word before it is written to memory or after it is read from memory.

data representation *Computer Programming.* the machine-readable code or format that is interpreted and produced by computer instructions.

data retrieval *Computer Programming.* the process of searching for and selecting data in files or in a database stored in a computer.

data rules *Computer Programming.* specific conditions, conventions, and restrictions that must be met when processing data.

data security see DATA PROTECTION.

data set *Computer Programming.* a set of related data records in a form that can be used by a computer.

data set migration *Computer Programming.* the moving of infrequently used or inactive data from on-line storage to archival or back-up storage.

data sheet *Computer Technology.* a form for collecting or recording source data that is designed for ease and convenience of transcription to machine-readable format.

data sink *Computer Technology.* the equipment at the receiving location that accepts and stores data signals after transmission via a data communications channel.

data source *Computer Technology.* the equipment at the sending location that supplies the data signals to be transmitted over a data communications channel.

data statement *Computer Programming.* a nonexecutable programming language statement that declares constant data elements to be used in the program.

data station *Computer Technology.* a remote terminal device used for communicating with a centrally located computer, as well as for off-line processing.

data stream *Computer Technology.* serial data being transmitted over a channel.

data structure *Computer Programming.* the organization of stored data or records in a regular or characteristic way, such as in an array, tree, list, queue, or stack.

data tablet see DIGITIZING PAD.

data tracks *Computer Technology.* sequences of positions where data can be recorded, either on a continuous medium, such as magnetic tape, or on a rotating medium, such as a drum or disk.

data transfer *Computer Technology.* the movement of data from one location to another without changing the information content.

data transparency *Computer Technology.* the property of transmitted data such that the data may not have any characteristics that are meaningful to the transmission protocol and the transmission may not interfere with any data pattern.

data type *Computer Programming.* a description of a particular class of data in a program, including the representation of the data, its components and their types, and operations that can be performed on it.

data under voice *Telecommunications.* a telephone service providing wideband digital signals (up to 56 kb/s) that are carried on existing microwave radio systems at the lower end of the frequency spectrum being transmitted, in addition to the usual multiplexed voice signals.

data unit *Computer Programming.* a set of characters or digits treated together as a single unit.

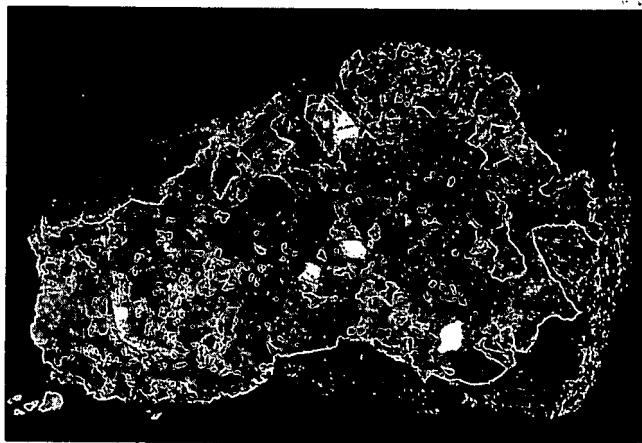
data verification *Computer Programming.* the process of checking input data for transcription errors.

data word *Computer Programming.* a computer word containing data to be processed.

date-time group *Telecommunications.* a set of characters that are used in a message to express the date and time in a prescribed format, such as day-month-year-hour-minute.

Datiscaceae *Botany.* a mainly temperate family of dicotyledonous perennial herbs and large trees in the order Violales, characterized by apetalous flowers, capsular fruit, and numerous tiny seeds with little or no endosperm.

datolite *Mineralogy.* $\text{CaBSiO}_4(\text{OH})$, a brittle, varicolored monoclinic mineral with a vitreous luster, occurring in massive and crystalline forms, having a specific gravity of 2.8 to 3 and a hardness of 5 to 5.5 on the Mohs scale; found as a secondary mineral in cavities and veins in basic igneous rocks.



datolite

datum [dat'əm; dāt'əm] *Science.* plural, **data**, an individual piece of information, such as a fact or statistic. *Computer Programming.* see DATA ITEM. *Engineering.* plural, **datums**, in a horizontal control survey, a base consisting of the latitude and longitude of a point, the azimuth of a certain line from this point, and two constants used in defining the terrestrial spheroid.

datum-centered ellipsoid *Geodesy.* the ellipsoid that gives the best fit to the astrogeodetic network of a particular datum; it therefore does not necessarily have its center at the center of the earth.

datum horizon

daylight control

datum horizon *Geology*. an easily recognizable, extensive stratigraphic bed or formation used as a reference surface in determining the positions of rock strata when making comparisons of thicknesses of strata, or from which contours are drawn in making structure-contour maps. Also, STRUCTURAL DATUM, CONTOUR HORIZON.

datum plane *Engineering*. a permanently situated plane or surface to which soundings, elevations, or other data are referred. Also, datum level.

datum point *Cartography*. any point of known location that serves as a reference or base for the measurement of other quantities.

datum transformation *Geodesy*. the systematic elimination of discrepancies between adjoining or overlapping triangulation networks from different datums, accomplished by moving the origins, rotating, and stretching the networks to fit each other.

daturlism *Toxicology*. poisoning due to ingestion of nightshade or other plants of the genus *Datura*; symptoms may include hallucinations and delirium.

Daubentonidae *Vertebrate Zoology*. the aye-ayes, a monotypic family of arboreal nocturnal primates found only in northern Madagascar, in which all the digits except the big toe have claws rather than nails.

daubing *Building Engineering*. the covering or coating of walls with a soft adhesive matter, such as plaster, using a spreading motion.

daubreelite *Mineralogy*. $\text{BiO}(\text{OH}, \text{Cl})$, a dull, yellowish tetragonal mineral with a massive, earthy appearance, having a specific gravity of 6.5 to 7.56 and a hardness of 2 to 2.5 on the Mohs scale; found mixed with clay in mines in Bolivia and Utah.

dauermodification *Cell Biology*. a phenotypic modification that is acquired by a cell and may persist in the cytoplasm for a few generations but is not incorporated into the genetic material of the cell. (A term based on the German word *Dauer*, meaning "duration.")

daughter *Nuclear Physics*. a term used to denote a nuclide produced by the radioactive decay of another nuclide. Also, DECAY PRODUCT.

daughter board *Computer Technology*. an integrated circuit card that is plugged into the mother board or back plane of a computer. Also, daughter card.

daughter cell *Cell Biology*. either of two cells that are produced from the mitotic division of a parent cell.

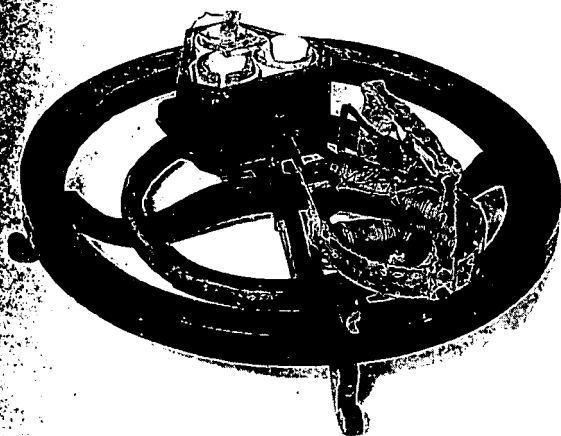
daunorubicin *Oncology*. an antineoplastic antibiotic substance that is isolated from *Streptomyces peucetius* and used to treat cancers such as acute lymphocytic and granulocytic leukemia. Also, daunomycin.

Dauphine twin law *Crystallography*. a twin law specifying a relationship between twin crystals in quartz, in which the twin is formed by the rotation of two left-handed or right-handed crystals 180° about the *c* axis. Also, Dauphine law.

Dausset, Jean born 1916, French physiologist; shared Nobel Prize for showing the existence of major histocompatibility complex in humans.

Davalliaceae *Botany*. a family of mostly epiphytic ferns of the order Filicales, characterized by a simple scaly rhizome, simple to finely divided fronds, and sori with indusium on lower leaf surfaces; includes the rabbit's-foot, sword, and Boston ferns.

Davenport, Thomas 1802-1851, American inventor; he invented the early Davenport electric motor, which he then used to power the first model electric locomotive (1835).



Davenport electric motor

Davian *Geology*. 1. a European subdivision of the Upper Cretaceous period. 2. describing various types of limestone formations found in Denmark, southeastern France, Spain, and Portugal.

Davida *Astronomy*. asteroid 511, discovered in 1903 and measuring 318 kilometers in diameter; it belongs to type C.

davidite-(La) *Mineralogy*. $(\text{La}, \text{Ce})(\text{Y}, \text{U}, \text{Fe}^{2+})(\text{Ti}, \text{Fe}^{3+})_{20}(\text{O}, \text{OH})_{38}$, a dark-brown to black, opaque, uraniferous trigonal mineral; massive in habit or occurring as cubelike tabular or pyramidal crystals; having a specific gravity of 4.42 and a hardness of 6 on the Mohs scale.

Davidson current *Oceanography*. a Pacific Ocean countercurrent that sets northward in winter along the west coast of the U.S. from northern California to at least 48°N .

Davidsoniaceae *Botany*. a monospecific family of small, dicotyledonous, tanniferous trees of the order Rosales, distinguished by pungent red hairs that cover twigs, leaves, and fruits on young specimens, large, pinnately compound leaves, and tart, plumlike edible fruits; native to Australia.

Davidsonina *Paleontology*. a spire-bearing genus of articulate brachiopods of the Lower Carboniferous.

davlesite see HEMIMORPHITE.

davisonite *Mineralogy*. a mixture of crandallite and adatite.

Davison, Clinton 1881-1958, American physicist; shared Nobel Prize for the discovery of electron diffraction by crystals.

Davis's quadrant *Navigation*. the backstaff or sea quadrant, invented by John Davis about 1590. When using this instrument, the navigator turned his back to the sun and used a shadow cast by the instrument to determine the zenith distance of the sun.

davit *Naval Architecture*. a pair of upright or angled cranes, often with curved tops; it is often used as a hoist and holding area for a ship's boat.

Davy, Sir Humphry 1778-1829, English chemist; the first to isolate sodium, potassium, calcium, magnesium, chlorine, barium, and strontium; invented the Davy mining lamp.

Davy Crockett *Ordinance*. the popular name for a mobile rocket launcher designed to fire a small nuclear warhead; the M-28 version can be handled by a three-man crew and has a range of 1.5 miles; the heavier M-29 has a range of 3 miles. (Named for Davy Crockett, 1786-1836, American frontiersman and folk hero.)

Dawes' limit *Optics*. the limit placed on the resolving power of a telescope by the effects of diffraction.

dawn *Astronomy*. the first light in the sky before sunrise, equivalent to morning astronomical twilight.

dawn side *Astronomy*. the hemisphere of a planet or moon that lies nearest the morning terminator.

Dawson, George Mercer 1849-1902, Canadian geologist; son of Sir John Dawson; studied surface geology and glacial phenomena.

Dawson, Sir John 1820-1899, Canadian geologist; with Sir Charles Lyell, studied strata and fossils of eastern Canada.

Dawsoniales *Botany*. an order of mosses with rigid, erect stems growing from a rhizomatous base; distinguished from the related Polytrichales by capsule form and gametophore size.

dawsonite *Mineralogy*. $\text{NaAl}(\text{CO}_3)(\text{OH})_2$, a transparent, colorless or white orthorhombic mineral with a perfect cleavage, having a specific gravity of 2.44 and a hardness of 3 on the Mohs scale; found as a low-temperature mineral in shale.

day *Science*. in general use, a period of 24 hours. *Astronomy*. 1. a period of time that is based on the spinning of the earth on its axis as it moves around the sun, varying slightly from 24 hours and measured, for example, from noon to noon (a solar day) or from one transit of a star to its next transit (a sidereal day). 2. a similar measurement of the rotation of the moon or another planet. *Architecture*. a division of a window, especially of a large church window.

DAY *Aviation*. the airport code for Dayton, Ohio.

day beacon *Navigation*. an unlighted fixed aid to navigation.

day clock *Computer Technology*. a clock that represents ordinary "wall clock" time and can be read by a computer. Also, TIME-OF-DAY CLOCK.

daydream *Psychology*. dreamlike thinking while awake; a fantasy or pleasant mental image indulged in during waking hours.

dayglow *Astronomy*. a faint luminosity observed in the daytime sky, caused when charged particles from the sun strike atoms and molecules in the earth's atmosphere.

Dayia *Paleontology*. a genus of Silurian brachiopods of the extinct sub-order Spiriferacea and family Atrypidae.

daylight control *Engineering*. a device, often used in outdoor lamps, that causes automatic electrical activation when it is sufficiently dark and turns off when daylight returns.

principle of action and reaction *Mechanics.* another term for Newton's third law of motion, which states that for every action there must be an equal and opposite reaction.

principle of constant proportions *Oceanography.* the relationship to one another of the ions of conservative elements, such as sodium, chloride, sulfate, magnesium, calcium, and potassium, whose ratios are almost invariable in open ocean water, regardless of variations in total salinity. Also, MARCET'S PRINCIPLE, LAW OF RULE OF CONSTANT PROPORTIONS.

principle of covariance *Physics.* a principle of special relativity stating that the laws of physics have the same mathematical forms in all inertial frames of reference.

principle of duality see DUALITY PRINCIPLE.

principle of equivalence see EQUIVALENCE PRINCIPLE.

principle of insufficient reason *Statistics.* the historically controversial principle stating that if no reason can be found to consider any of a set of outcomes of a random variable more likely to occur than the others, then the outcomes should be assigned equal probability.

principle of least action see MAUPERTUIS' PRINCIPLE.

principle of least constraint see GAUSS' PRINCIPLE.

principle of least energy see LEAST-ENERGY PRINCIPLE.

principle of least time see FERMAT'S PRINCIPLE.

principle of optimality *Control Systems.* the principle stating that in an optimal system, any portion of the optimal state trajectory is optimal between the states that are joined by it.

principle of radial displacement *Photogrammetry.* the principle that points vertically above one another on the ground appear to be displaced radially with respect to one another on a photograph, the center of which is the principal point or nadir.

principle of reciprocity see RECIPROCITY THEOREM.

principle of stationary time see FERMAT'S PRINCIPLE.

principle of superposition *Physics.* a principle applied to linear phenomena, stating that the response to a sum of stimuli equals the sum of the responses to the individual stimuli. Also, SUPERPOSITION PRINCIPLE.

principle of the maximum *Mathematics.* a nonconstant analytic function f defined on a domain D cannot assume its maximum modulus on the interior of D . If D is closed, bounded, and simply connected, the maximum-modulus theorem states that the maximum value of $|f|$ occurs on the boundary of D . Usually called the MAXIMUM PRINCIPLE.

principle of the minimum *Mathematics.* a nonconstant, nonzero analytic function f defined on a domain D cannot assume its minimum modulus on the interior of D . If D is closed, bounded, and simply connected, the maximum-modulus theorem states that the maximum value of $1/|f|$, and hence the minimum value of $|f|$, occurs on the boundary of D . Also, MINIMUM PRINCIPLE.

principle of virtual work *Mechanics.* the principle stating that in order for a condition of equilibrium to exist for a conservative mechanical system or elastic structure, the total virtual work of all external forces acting on it must be zero for any admissible virtual displacement.

Prinsiaceae *Botany.* a family of marine flagellate algae of the order Isochrysidales, characterized by coccolith-bearing cells with a rudimentary haptonema and without microtubules.

print *Graphic Arts.* 1. to produce text copy, artwork, and so on, on paper or another medium, by the application of inked type, plates, blocks, or the like. 2. a collective term for the process, product, industry, and craft of producing text and artwork in this manner. 3. a developed photographic image, usually a positive made from a negative. 4. a lithographic reproduction of a work of art or photograph.

printability *Graphic Arts.* the degree to which a paper surface will reproduce a desired image; factors include the smoothness, cushion, coating coverage, and ink receptivity of the paper.

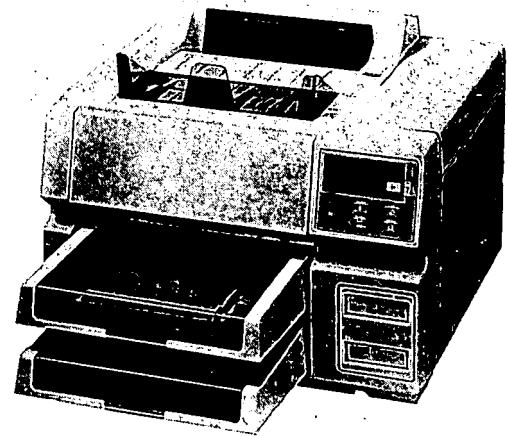
print driver *Computer Technology.* a program that controls the operations of a printer, such as buffering the output, printing a line of output, advancing the form, and tabulating.

printed circuit *Electronics.* 1. a circuit in which components are connected by conductive strips, painted or etched onto an insulating board. 2. the board itself; a printed circuit board.

printed circuit board *Design Engineering.* a plastic card or rectangular device onto which various chemical elements and substrates are laid so that wiring can be applied; intrinsic to certain electronic and computerized devices including robots, and constituting the control electronics and motor drives in the power control system.

printed-wiring armature *Electricity.* an armature whose conductors consist of etched metal lines on both sides of a thin insulating disk; used with variable high-speed motors and servomotors.

printer *Graphic Arts.* 1. a person or business whose work is to prepare or produce printed copy. 2. a machine designed to produce typed copy through electronic impulses, now often generated by a computer or word processor. 3. any of the four color positives used in four-color printing.



computer printer

printer's error *Graphic Arts.* in proofreading, an error not appearing in the manuscript or previous galleys; distinguished from author's alterations in billing for corrections. Also, PE.

printer's ink see PRINTING INK.

printer's palsy *Toxicology.* poisoning due to exposure to the antimony found in printers' materials; symptoms may include inflammation of the nerves and paralysis.

printer's rule or ruler see TYPE GAUGE.

print head *Computer Technology.* the mechanism in a printer that forms a character and prints it on the paper. Also, **printing element**.

printing *Graphic Arts.* any of the various methods of creating printed material, such as letterpress or lithography. *Textiles.* the process of applying color or colors to fabric or yarns in definite patterns, using engraved blocks, rollers, screens, etc.

printing calculator *Computer Technology.* a calculator that displays data on paper rather than, or in conjunction with, a visible display.

printing ink *Materials Science.* a mixture of carbon black or other pigments in a vehicle of mineral oil or linseed oil that flows smoothly, dries quickly, and has a consistency allowing it to hold enough color to make printed matter legible; used to transfer the image on a press plate to the printing surface.

printing press *Graphic Arts.* a usually power-driven machine designed to transfer images from inked type or plates onto paper or other substrate.

printing process *Graphic Arts.* the entire process of producing a printed work; commonly divided into four stages: composition, makeup, presswork, and binding.

printing telegraphy *Telecommunications.* in telegraphy, a system by which received signals are automatically recorded in printed characters.

printmaking *Graphic Arts.* the use of printing methods and technology to produce original works of art or reproductions.

print member *Computer Technology.* the component of a printer that determines the form of a character to be printed, such as a print chain or print wheel.

printout *Computer Technology.* the paper copy of the output from a computer system.

printout paper *Graphic Arts.* the paper, often in continuous folded and perforated sheets, designed to receive the output of a computer or word processor.

print position *Computer Technology.* any location on a form where a character may be printed.

print queue *Computer Technology.* a sequence of files, ordered by arrival time, size, priority number, or some other method, waiting to be printed by the operating system.

print server *Computer Technology.* a computer connected to one or more printers that can receive print jobs from other computers via a network and print them.

print-through *Electronics*. the process by which an audio signal is transferred from one layer of magnetic tape to the next on a tape-recorder reel.

print train *Computer Technology*. 1. a revolving carrier in a chain printer on which the type slugs are mounted to make impressions on the paper. 2. the electronic character set in a laser printer that serves a similar function.

print wheel see DAISY WHEEL.

prion *Biochemistry*. an infectious particle that does not contain DNA or RNA, but consists only of a hydrophobic protein; believed to be the tiniest infectious particle.

Prioniodidae *Paleontology*. a former term for a group of conodonts, superseded by the term Prioniodontidae.

Prioniodinidae *Paleontology*. a family of conodonts in the order Prioniodinida, having composite teeth; they arose from the family Chirognathidae at the end of the Ordovician; they were highly diversified and widespread by the Late Devonian, declining in the Permian, and extinct in the Middle Triassic.

Prioniodontidae *Paleontology*. a family of conodonts with composite teeth in the class Conodonti and the order Prioniodontida; known only from the Early Ordovician.

prionodont *Vertebrate Zoology*. having simple, similar teeth in a saw-like row.

Prionodontaceae *Botany*. a small tropical family of robust, light-green, glossy mosses of the order Isoetiales that form loose mats on tree bark and moist humus; characterized by creeping stems, ascending branched, secondary stems, lateral sporophytes, and lanceolate leaves that taper to a fine point.

prismite *Mineralogy*. $(Y, Ca, Fe, Th)(Ti, Nb)_2(O, OH)_6$, an orthorhombic, black or dark-brown to yellow mineral massive in habit or occurring as prismatic crystals, having a specific gravity of 4.95 and a hardness of 5 to 6 on the Mohs scale; found in feldspathoidal pegmatites and as a detrital mineral in placers. Also, AESCHYNITE-(Y).

priority the fact of being more important or of taking precedence; specific uses include: *Computer Technology*. a feature that allows different tasks, data elements, and so on, to be ranked in order of importance for processing. *Military Science*. an indication of the relative importance of targets, missions, and other operational tasks; it is not an exclusive or final designation of the order in which these tasks are accomplished.

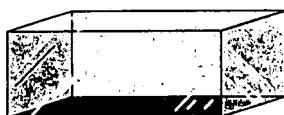
priority processing *Computer Technology*. 1. a method used by operating systems in which the order of jobs selected for execution is determined by a system of priorities. 2. a method of handling interrupts in which an interrupt service routine can be interrupted only by a device of higher priority. The user program has the lowest priority.

priority queue *Computer Technology*. a data structure in which each inserted element has a priority number, and each removal or access takes the earliest of the elements with highest priority.

Prioropidae *Vertebrate Zoology*. an equivalent name for Laniidae, the bird family of shrikes.

Prisere *Ecology*. see PRIMARY SUCCESSION, def. 2.

prism [priz'm] *Optics*. an element bounded by two polished plane surfaces that deviates or disperses a beam of light; commonly a wedge-shaped piece of glass. *Crystallography*. a crystal having faces parallel to the vertical axis and intersecting the horizontal axes. *Geology*. an elongated, narrow, wedge-shaped sedimentary structure for which the ratio of width to thickness is greater than 5:1, but less than 50:1. Also, CRYSTAL FORM. *Mathematics*. a prismatoid with congruent polygons as bases; the lateral faces are all parallelograms. If the lateral faces of a prism are perpendicular to the bases, the prism is a **right prism**; if, in addition, the bases are regular (congruent) polygons, it is a **regular prism**.



prisms

prismatic [priz mat'ik] *Science*. of or relating to prisms.

prismatic astrolabe *Engineering*. an instrument that determines the exact astronomical position of stars at a designated time, using a pan of mercury to form an artificial horizon and a prism positioned in front of a horizontal telescope.

prismatic coefficient see LONGITUDINAL COEFFICIENT.

prismatic compass *Engineering*. a hand-held surveyor's compass that contains a prism positioned so that the compass can be read while the sight is being taken.

prismatic error *Optics*. a deviation or distortion that results when an optical element, such as a mirror, has unparallel faces. *Navigation*. an error in the reading of a sextant due to lack of parallelism of the two surfaces of an optical element such as a mirror or shade glass.

prismatic joint *Robotics*. a joint consisting of two nested links that slide into or along side each other.

prismatic layer *Invertebrate Zoology*. the middle layer of a mollusk shell, composed of polygonal prisms of calcium carbonate between the periostracum and the nacre.

prismatic plane *Crystallography*. in noncubic crystals, any plane parallel to the principal axis.

prismatic surface *Mathematics*. given a fixed line and a broken line lying in a plane not containing the fixed line, the surface formed by the union of all lines parallel to the fixed line that intersect the broken line.

prismatoid *Mathematics*. a polyhedron with the property that each of its vertices lies on one of two parallel planes, so that it has two parallel faces (bases). Triangles, trapezoids, or parallelograms form the other faces.

prism binoculars *Optics*. binoculars that employ two astronomical telescopes, with total reflecting prisms, to erect images, thus allowing shorter tube lengths than would be found in other telescopes of equal power. Also, **prismatic binoculars**.

prism crack *Geology*. a mud crack forming polygonal patterns on the surface of a drying mud puddle that causes the sediment to break into prisms which stand perpendicular to the bedding.

prism diopter *Optics*. a unit of measure for the deviating power of a prism, which is expressed by multiplying the tangent of the angle of deviation of a ray of light by 100; used primarily for narrow-angle prisms.

prism joint *Robotics*. a robotic articulation in which a sliding motion constitutes the only degree of freedom.

prism level *Engineering*. a surveying level with a prism positioned so that the level bubble can be determined by the surveyor without looking away from the eyepiece.

prismoid *Mathematics*. a prismatoid with an even number of vertices, half on each parallel face (base), and with parallelograms or trapezoids as the other faces. If the bases are congruent, the result is a prism.

prism spectrograph *Spectroscopy*. a spectrograph in which a prism is used to separate incident light into component wavelengths; used in the analysis of materials by flame photometry.

pristane *Organic Chemistry*. $C_{19}H_{40}$, a colorless, combustible liquid derived from shark liver and herring oil; soluble in most organic solvents; boils at 296°C and freezes at -100°C; used as a precision lubricant. Also, 2,6,10,14-TETRAMETHYLPENTADECANE.

Pristidae *Vertebrate Zoology*. the sawfishes, a family of bottom-dwelling rays composing the order Pristiformes, distinguished by a long snout with sharp pointed teeth of uniform length protruding from either side and gills on the ventral surface; found in all tropical seas and in Lake Nicaragua in Central America.

Pristiformes *Vertebrate Zoology*. the sawfishes, an order comprising the family Pristidae.

Pristiophoridae *Vertebrate Zoology*. the sawsharks, a family of marine sharks composing the order Pristiophoriformes, characterized by a long snout with alternating long and short teeth that are sharp and pointed, barbels on the underside of the snout, and small pectoral fins behind gill slits; found off the coasts of Australia, Korea, Japan, and South Africa.

Pristiophoriformes *Vertebrate Zoology*. the sawsharks, the marine fish order comprising the family Pristiophoridae.

privacy system *Telecommunications*. a radio system, used in overseas telephone transmissions, that scrambles an outgoing signal to such a degree that it is undecipherable to a listener who does not have access to an unscrambling device. Also, **privacy equipment**, **privacy transformation**.

private *Military Science*. the lowest military rank in most armies; in the U.S. Army, an enlisted soldier of one of the three lowest grades; in the U.S. Marine Corps, an enlisted soldier of one of the two lowest grades;

private first class is the highest grade of private in both services.

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dasypaedes

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d.c. amplifier

piston attached to the part to be controlled (fitted with a nonreturn valve if required) sliding in a cylinder containing liquid to impede motion.

dasypaedes (Zool.). Birds which when hatched have a complete covering of down. Cf. altrices.

data (Comp.). All the operands and results of computer operations directed by the detailed instructions comprising the program. A program can be data for another program, e.g., a compiler takes a program as data.

data bank (Comp.). Collection of databases or large files of data.

data base (Comp.). Collection of structured data independent of any particular application.

database management system (Comp.). Software that handles the storage, retrieval and updating of data in a computer, often integrating data from a number of files. Also *DBMS*. See *data model*.

database typesetting (Print.). The storing of information in a database for publications such as directories which can be periodically updated by computer processing and prepared for phototypesetting.

data capture (Comp.). Collecting data for use in a particular computer process, e.g., for monitoring.

data compaction (Comp.). Term often applied to data compression that involves only the removal of extraneous and unnecessary space and therefore is not reversible.

data compression (Comp.). Altering the form of data to reduce its storage space.

data dictionary (Comp.). Index of the contents of a set of files or a database. See *directory*.

Data Encryption Standard (Comp.). An automatic method of data encryption designed by IBM and adopted as a standard.

data flow (Comp.). An approach to the organization of complex algorithms and machines, in which operations are triggered by the arrival of data.

data flowchart (Comp.). Flowchart used to describe a complete processing system, clerical operations and individual programs, but excluding details of such programs. Also *system flowchart*.

data handling (Space). The management and flow of data to-and-from a space vehicle; the on-board subsystem might include data buses, commutators, computers, recorders, multiplexers, etc. whereas the ground segment uses equipment like de-multiplexers and display units to interpret the transmitted signal which is sent either directly or via a data relay satellite.

data-handling capacity, capability (Telecomm.). The maximum amount of information which can be transmitted and received over a given channel or circuit.

data-handling system (Comp.). Term, no longer widely used, for automatic or semi-automatic equipment for collecting, receiving, transmitting, and storing numerical data. It may be handled continuously (as analogue or position signals) or in discrete steps (as digital or binary signals). The system may also be able to perform calculations on the stored data.

data model (Comp.). A structure for the arrangement of data which aids data retrieval. There are three models in general use, a *hierarchical model*, a *network model* and one giving a *relational data base*.

data preparation (Comp.). Translation of data into machine readable form.

data processing (Comp.). Traditional name given to business information processing. Abbrev. *DP*.

data protection (Comp.). Safeguards to protect the integrity, privacy and security of data.

data reduction (Comp.). The computerized repackaging of observational data to make it more concise and meaningful.

data retrieval (Comp.). The search for and selection of data from a store.

data signalling rate (Telecomm.). The aggregate rate at which binary digits, including any control bits, are transmitted over a channel or circuit, expressed in bits/second. Cf. *baud*.

data storage (Comp.). See *memory capacity*.

data structure (Comp.). Organized form in which grouped

data items are held in the computer, such as list, tree, table, string.

data type (Comp.). Most programming languages require a variable to be declared as a *data type*. Basic restrictions and assumptions will then control the use of the variable. See *character*, *tree*, *stack*, *queue*, *set*, *real*, *integer*, *Boolean*, *string*, *list*.

Datel (Comp.). TN for data transmission facilities provided by British Telecom.

datave bond (Chem.). See *covalent bond*.

datolite (Min.). Hydrated calcium borosilicate occurring as a secondary product in amygdaloids and veins, usually as distinct prismatic white or colourless monoclinic crystals.

datum (Aero.). *Datum level*, or *rigging datum*, is the horizontal plane of reference, in flying attitude, from which all vertical measurements of an aircraft are taken. *cg datum* is the point from which all mass moment arms are measured horizontally when establishing the centre of gravity and loading of an aircraft.

datum (Eng.). A point, line or surface to which dimensions are referred on engineering drawings and from which measurements are taken in machining or other engineering operations.

datum (Surv.). An assumed surface used as a reference surface for the measurement of reduced levels.

daubing (Build.). (1) The operation of dressing a stone surface with a special hammer in order to cover it with small holes. (2) A rough-stone finish given to a wall by throwing a rough coating of plaster upon it. See *rough cast*.

daughter (Biol.). Offspring belonging to the first generation, whether male or female; as *daughter cell*, *daughter nucleus*.

daughter product (Phys.). A nuclide that originates from the radioactive disintegration of another *parent nuclide*.

Davis apparatus (Ships). A respiratory apparatus specially designed to permit escape from a pressure-equalizing chamber in a submarine. Oxygen is breathed from a chamber which, embracing the wearer, gives buoyancy and assists rise to the surface.

Davisson-Germer experiment (Electronics). The first demonstration (1927) of wavelike diffraction patterns from electrons by passing them through a nickel crystal.

Davy lamp (Min.Ext.). The name of the safety lamp invented by Sir Humphrey Davy in 1815.

day (Astron.). See *apparent solar*, *mean solar*, *sidereal*.

daylight (Eng.). The distance between the bed surface and the bottom of the ram of a press.

daylight factor (Elec.Eng.). The ratio of the illumination measured on a horizontal surface inside a building to that which obtains at the same time outside the building due to an unobstructed hemisphere of sky. Occasionally called *window efficiency ratio*.

daylight lamp (Phys.). A lamp giving light having a spectral distribution curve similar to that of ordinary daylight.

day-light size (Build.). The distance between successive mullions in a window and between lintel and sill.

day-neutral plant (Bot.). A plant in which flowering is not sensitive to day-length. Cf. *long-day plant*, *short-day plant*. See also *photoperiodism*.

dB (Acous.,Telecomm.). Abbrev. for *decibel*.

dBA, dBB, dBC (Acous.). Result of a sound pressure level measurement when the signal has been weighted with a frequency response of the A, B, or C curve. The dBA curve approximates the human ear and is therefore used most in noise control regulations.

dBm (Telecomm.). A unit for expressing power level in decibels, relative to a reference level of one milliwatt.

DBMS (Comp.). See *database management system*.

DBS (Image Tech.). *Direct Broadcasting by Satellite*.

DBS (Telecomm.). Abbrev. for *Direct Broadcast Satellite*.

d.c. (Elec.Eng.). Abbrev. for *direct current*.

d.c. (Print.). Abbrev. for *double column*; *double crown*.

d.c. amplifier (Elec.Eng.). One which uses direct coupling between stages (i.e. no blocking capacitor) to amplify from zero frequency (d.c.) signals to signals of higher frequency.

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up equally between its different capacities for holding energy, or degrees of freedom.

print (Foundry). See core prints.

print (Image Tech.). The image, usually a positive one, obtained by exposing a photographic material through another image, such as a negative.

printed circuit (Electronics). An electronic sub-assembly consisting of an insulating board or card with copper conductors laminated on; the conductors may be formed by a photo-chemical etching process or by electrodeposition. The circuit components, diodes, transistors, integrated circuits etc., may be inserted into pre-drilled holes by hand or by machine, manufacture being concluded by hand or dip soldering.

printer (Comp.). Output device producing characters or graphic symbols on paper. See line printer, Xerographic, daisy-wheel, dot-matrix, golf-ball, laser, ink-jet, impact, thermal.

printer (Image Tech.). Machine for the exposure of photographic paper or film to produce prints, either by contact or by optical means. Exposure may be made one picture at a time or, in the case of motion pictures, with the film moving continuously.

printer point (Image Tech.). See light change point.

print hammer (Comp.). Component causing the contact between the character, ribbon and paper in an impact printer.

printing (Image Tech.). The operation of making a still or motion picture print by the exposure of photographic paper or film.

printing (Print.). Any process of producing copies of designs or lettering by transferring ink to paper (or other material) from a printing surface. There are 3 main classes according to the method of application of the ink to the printing surface: (a) *relief*, or *letterpress*, printing surfaces have the ink-carrying parts in relief, so that rollers deposit ink on these parts only, as in printer's type; (b) *planographic* printing surfaces are prepared so that parts accept the ink from the rollers although there is no difference in level; the ink-accepting parts may be greasy, the remainder being moist and ink-rejecting, as in lithography; (c) *intaglio* printing surfaces have the ink-carrying portions hollowed out; the whole surface is covered with ink and then cleaned off, leaving the hollows filled with ink, which is lifted out when the paper is pressed into contact. All classes can be adapted for use with a cylindrical printing surface which can be printed at high speed by continuous rotation against another cylinder, with the paper to be printed running between them.

printing diameter (Print.). The correct diameters of printing cylinder and impression surface.

printing down (Print.). A stage in the making of printing surfaces, for any of the main processes, in which the surface, after being made light sensitive, is exposed to suitable light through a negative (or, in some cases, a positive).

printing ink (Print.). A mixture of carbon black, or other pigments, in a vehicle of mineral oil, linseed oil, etc. Inks are formulated to dry by penetration, evaporation, oxidation, or by a combination of these, and also can be heat-set, cold-set, or moisture-set.

printing-out paper (Image Tech.). See POP.

print out (Comp.). Printed output from the computer.

print-out mask (Print.). Opaque mask used to cover the image areas of a plate during a second exposure to remove unwanted work from the printing plate.

print-through (Acous.Comp.). In magnetic tape recording, the transfer of a recording from one layer to another when the tape is spooled or reeled giving rise to a form of distortion; also called *transfer*.

priser (Bot.). Same as primary sere.

prism (Crystal.). A hollow (open) crystal form consisting of three or more faces parallel to a crystal axis.

prism (Maths.). A solid of which the ends are similar, equal and parallel polygons, and of which the sides are parallelograms.

prism (Phys.). Triangular prisms made of glass and other

transparent materials are used in a number of optical instruments. Equilateral prisms are used at minimum deviation in spectroscopes for forming spectra. 90° prisms are used for totally reflecting a ray through a right angle in binoculars, periscopes and range-finders.

prismatic (Genrl.). Prism-shaped; composed of prisms.

prismatic astrolabe (Surv.). An instrument for observing stars at an altitude of 60° (in some instruments, 45°) at different azimuths around the horizon, these observations being used for the computation of latitude and local time.

prismatic binoculars (Phys.). Binocular telescopes in which the tubes, instead of being straight are effectively shortened by using total reflecting prisms to 'fold' the light paths. The prisms at the same time produce an erect image.

prismatic coefficient (Ships). The ratio between the immersed volume of the vessel and the volume of an enclosing prism with a constant transverse section identical with the maximum immersed cross-section area of the vessel.

prismatic compass (Surv.). A handheld form of surveyor's compass in which the eye vane carries a prism reflecting a view of a graduated ring, attached to and moving round with the compass needle.

prismatic layer (Zool.). In the shell of *Mollusca*; a layer consisting of calcite or aragonite lying between the periostracum and the nacreous layer. In the shell of *Brachiopoda*, the inner layer of the shell, composed mainly of calcareous, but partly of organic material.

prismatic (monoclinic) sulphur (Chem.). See sulphur.

prismatic spectrum (Phys.). A spectrum formed by refraction in a prism, as contrasted with a *grating spectrum* formed by diffraction.

prismatic system (Crystal.). See orthorhombic system.

prism light (Build.). A pavement light in which glass prisms internally reflect light.

prismoid (Maths.). A body which has plane parallel ends and is bounded by plane sides.

prismoidal formula (Civ.Eng.). A formula used in the calculation of earthwork quantities. It states that the volume of any prismoid is equal to one-sixth its length multiplied by the sum of the two end-areas plus four times the mid-area.

prism square (Surv.). A form of optical square in which the fixed angle of 90° between the lines of sight is obtained by reflection from the surfaces of a suitably shaped prism.

prison ashlar (Build.). A block of stone dressed so that the faces are wrought into holes.

privacy (Comp.). Recognition of the private nature of certain data. In consideration of privacy, safeguards are usually built into systems which hold confidential data to prevent unauthorized access. Now often also safeguarded by legal constraints.

privacy system (Telecomm.). See scrambler, inverter.

private automatic branch exchange (Telecomm.). A small automatic exchange on a subscriber's premises; for internal telephone connections, with extensions over the public telephone system through lines to the local exchange. Abbrev. *PABX*.

private automatic exchange (Telecomm.). An automatic exchange on private premises; not connectable with the public telephone system. Abbrev. *PAX*.

private branch exchange (Telecomm.). An automatic or manual exchange on a subscriber's premises which is used for internal connections, with extension through the local exchange to the public telephone system. Abbrev. *PBX*.

private exchange (Telecomm.). An exchange in a private establishment, which is not connected in any way with the public telephone service. Abbrev. *PX*.

private manual branch exchange (Telecomm.). A small manually-operated exchange on a subscriber's premises for establishing internal connections and extensions, and external connections over lines to the local exchange. Abbrev. *PMBX*.

private manual exchange (Telecomm.). A manually